DOCUMENT RESUME

ED 286 263 EA 019 648

AUTHOR Ainley, John; And Others
TITLE School Organization and the Quality of Schooling: A Study of Victorian Government Secondary Schools. ACER Research Monograph No. 29.
INSTITUTION Australian Council for Educational Research, Hawthorn.; Victoria Education Dept. (Australia).
REPORT NO ISBN-0-86431-048-X
PUB DATE 86
NOTE 179p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS Affective Measures; Curriculum Evaluation; *Decision Making; Educational Environment; Educational Objectives; Educational Policy; *Educational Quality; Educational Research; Foreign Countries; High Schools; Interpersonal Communication; Job Satisfaction; Multiple Regression Analysis; Path Analysis; *Policy Formation; Public Schools; *School Organization; Secondary Education; *Student Attitudes; Student Characteristics; Tables (Data); *Teacher Attitudes; Teacher Morale; Vocational Schools
IDENTIFIERS *Australia (Victoria)

ABSTRACT

The study reported in this monograph, which was conducted jointly by the Australian Council for Educational Research and the Education Department of Victoria, investigated the organization and curriculum of government secondary schools in Victoria, Australia, and how those factors influence what teachers do and what views students have of the quality of their school life. Data were drawn from a survey of organizational and curriculum arrangements in secondary schools, a study of teachers and students in a sample of 53 schools, and a series of studies based on field work in a selection of schools. Overall, data sources total 8,464 students comprising the sample from the 53 schools; and 1,646 teachers, representing a response rate of approximately 65 percent. Among the findings were that teachers' job satisfaction was enhanced when there was frequent communication among staff and when they saw the curriculum as being well-coordinated. Students viewed the quality of school life more favorably when the curriculum recognized their diverse aptitudes and when the level of communication among their teachers was high. The report is presented in eight chapters with 35 tables and 71 references. The appendices contain technical notes on sampling, the school life questionnaire, and the teacher questionnaire along with 11 technical references. Copies of the three questionnaires are attached. (MLF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED286263

SCHOOL ORGANIZATION AND THE QUALITY OF SCHOOLING

A Study of Victorian Government Secondary Schools

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Anne P. Norton

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EA 019 648

BEST COPY AVAILABLE

ACER RESEARCH MONOGRAPH NO. 29

SCHOOL ORGANIZATION AND THE QUALITY OF SCHOOLING: A STUDY OF VICTORIAN GOVERNMENT SECONDARY SCHOOLS

John Ainley
Rodney Reed
Hilary Miller

This research study was conducted in co-operation with the Education Department of Victoria

Australian Council for Educational Research
Hawthorn, Victoria
1986

Australian Council for Educational Research Limited
Radford House
Frederick Street, Hawthorn 3122
Telephone (03) 819 1400

First published 1986 by the
Australian Council for Educational Research

Copyright © ACER 1986

National Library of Australia
Cataloguing-in-publication data

Ainley, John, 1945-
School organization and the quality of schooling.

Bibliography.
ISBN 0 86431 048 X.
1. Public schools - Victoria. 2. High schools - Victoria - Administration. 3. High Schools - Victoria - Curricula. 4. High school environment - Victoria. 5. High school students - Victoria - Attitudes. 6. High school teachers - Victoria - Attitudes. I. Reed, R.L. (Rodney L.), 1943- II. Miller, Hilary, 1957- III. Australian Council for Educational Research. IV. Title. (Series: ACER research monograph; no. 29).

371'.01'09945

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without prior permission from the Australian Council for Educational Research Limited.

Cover design Louise Coutts

Printed in Australia by Allanby Press Printers Pty Ltd, Camberwell, Victoria.

CONTENTS

	Page
LIST OF TABLES	vi
LIST OF FIGURES	viii
ACKNOWLEDGEMENTS	ix
SUMMARY	xi
SECTION 1 SETTING THE SCENE	
CHAPTER 1 CONTEXT	3
Administrative Patterns in Government School Systems	3
Some General Features of Secondary Schools	4
The Study	5
The Report	6
CHAPTER 2 A FRAMEWORK FOR THE STUDY	8
The General Framework	8
System Factors	9
Size of School	10
Type of School	11
Student Characteristics	12
Social Background	12
Sex of Students	13
Year Level	14
School-Level Influences	14
Policy Formulation Structures	15
Structural Coupling	15
Co-ordination	16
Policy Implementation Structures	17
Affective Outcomes	18
Teachers	18
Students	18
An Overview	19
CHAPTER 3 STRATEGIES AND METHODS	20
The Initial Survey	20
The Fifty School Study	20
Teachers	20
Students	21
Sampling and Administration	24
Field Work	26
Purpose	26
Method and Techniques	27
The Schools	27
In Summary	30

Page

SECTION 2 SCHOOL ORGANIZATION

CHAPTER 4 CURRICULUM AND ORGANIZATIONAL FEATURES OF SECONDARY SCHOOLS IN VICTORIA 33
Information Base 34
Curriculum Arrangements 34
Types of Program in Years 7 to 12 34
The Range of Subjects in Years 7 to 12 36
Curriculum Arrangements in Year 12 39
General Curriculum Patterns in Years 11 and 12 44
Providing for Year 12: Two Cases 46
A Shared Campus Response 46
Introducing a Technical Year 12 Study Structure 50
Organizational Arrangements in Secondary Schools 51
Subschools 52
A Series of Mini-Schools: School D 52
Grouping Arrangements 55
Vertical Grouping in the Middle Years: Two Instances 57
In Summary 58

CHAPTER 5 DECISION MAKING STRUCTURES 59
Decision Making 59
Decision Levels 61
Participation in Decisions 66
Decision Making Structures in Seven Schools 69
In Summary 71

SECTION 3 AFFECTIVE ASPECTS OF SCHOOLING

CHAPTER 6 SCHOOL FACTORS AND TEACHERS JOB SATISFACTION 75
Structural Coupling 75
Linkages Between Teachers 75
Linkages with Co-ordinators and the Principal 77
Association with School Characteristics 78
Co-ordination of the School Program 83
The General Pattern 83
Relations with Linkages and School Characteristics 84
General Patterns of Job Satisfaction 87
Influences on Teacher Job Satisfaction 90
Analysis 90
Satisfaction with the Organizational Environment 91
Satisfaction with Students 92
Satisfaction with Work Load 92
The Effect of Including the two Community Schools 92
In Summary 94

CHAPTER 7 STUDENTS' QUALITY OF SCHOOL LIFE 97
The Pattern of Student Responses 97
Quality of School Life and Student Characteristics 100
An Overview 100
Year Level 100
Ethnic Background 105
Sex of Student 107
Socioeconomic Background 107

Page

School Organizational Features and Quality of School Life 108
Type of School 108
Vertical Grouping 110
Curriculum at Year 12 110
An Overview 110
High Schools 113
Technical Schools 114
In Summary 115
School Level Influences on the Quality of School Life 116
The Analysis 117
Positive Affect 119
Other Aspects of the Quality of School Life 120
In Summary 120
Influences on the Quality of School Life 121

CHAPTER 8 SCHOOL ORGANIZATION AND THE QUALITY OF SCHOOLING 122
Descriptions of the School System 122
School Organization and the Quality of School Life 124

REFERENCES 127

APPENDIX 1 SOME TECHNICAL NOTES 131

APPENDIX 2 QUESTIONNAIRES 155

LIST OF TABLES

		Page
Table 4.1	Types of Program in Years 7 to 12 in Victorian Secondary Schools (1984 Survey)	35
Table 4.2	Range of Subjects in Secondary Schools in Years 7 to 12 (1984 Survey)	38
Table 4.3	Year 12 Program in High Schools in 1984	40
Table 4.4	Average Numbers of Subjects Available in High Schools with Different Curriculum Structures at Year 12	42
Table 4.5	Types of Program at Year 12 in Technical Schools: 1984 Survey	44
Table 4.6	The Incidence of Vertical Grouping Among Different Types of Program Organization in Victorian Secondary Schools (1984 Survey)	56
Table 5.1	Levels at Which Decisions Were Taken in Various Areas	63
Table 5.2	Association Between Decision Levels and School Characteristics: Size and Location	65
Table 5.3	Type of Participation (Average Percentage Response) in Decisions in Specified Policy Areas	67
Table 5.4	Participation Levels in Specified Policy Areas and School Characteristics: Partial Correlation Coefficients with Size and Location	68
Table 6.1	Frequency of Communication in Specified Areas in Victorian Secondary Schools	76
Table 6.2	Frequency of Communication in Specified Areas by Type of School	78
Table 6.3	Frequency of Communication (Linkage) Association with School Characteristics	79
Table 6.4	Frequency of Communication (Linkage) Association with Size and Location of School	80
Table 6.5	School Characteristics and the Magnitude of Various Linkage Scores	82
Table 6.6	Teacher's Views of Co-ordination: Frequencies and Means for Scale Items	83
Table 6.7	Results of Regression Analysis of Co-ordination on Linkage and School Background Characteristics	84
Table 6.8	Associations Between Components of Linkage and Co-ordination after Controlling for School Size, Type and Social Composition	86

		Page
Table 6.9	Differences Between Types of School in Teacher Perceptions of Co-ordination	87
Table 6.10	Levels of Teacher Job Satisfaction	89
Table 6.11	Results of Regression Analysis of Measures of Teacher Job Satisfaction on School Level and Background Influences	91
Table 7.1	Quality of School Life Summary Statistics: All Year Levels, Fifty School Study 1984	98
Table 7.2	Adjusted Net Effect Size Estimates for Various Influences on Student Quality of School Life Scale Scores	101
Table 7.3	Quality of School Life Scores by Year Level	102
Table 7.4	Variation of Quality of School Life Scale Scores Across Year Levels Expressed as Adjusted Deviations from a Grand Mean	103
Table 7.5	Mean Quality of School Life Scale Scores Across Ethnic Groups	106
Table 7.6	Variation of Quality of School Life Scale Scores Across Ethnic Groups Expressed as Adjusted Deviations from a Grand Mean	106
Table 7.7	Mean Quality of School Life Scores by Sex	108
Table 7.8	Quality of School Life Scores by Type of School: Between Student Analysis	109
Table 7.9	Quality of School Life Scores by Vertical Grouping: Between Student Analysis	111
Table 7.10	Quality of School Life Scores for Year 12 Students in Different Courses	112
Table 7.11	Quality of School Life Scores for High School Students in 'Traditional' and 'Alternative' Year 12 Courses	114
Table 7.12	Quality of School Life Scores for Year 12 High School Students in Approved Study Structures and Traditional Courses	115
Table 7.13	Quality of School Life Scores for all Year 12 Students in Traditional and Alternative Courses	116
Table 7.14	Regression Analysis of Quality of School Life Scores on Student and School Influences	118

LIST OF FIGURES

		Page
Figure 2.1	A Framework for the Study	10
Figure 3.1	Items Grouped in the Domains of the Quality of School Life Questionniare	23
Figure 6.1	Path Diagram Linking School Characteristics, Linkage, and Co-ordination	85
Figure 6.2	Path Diagram of Influences on Teacher Satisfaction with Organizational Environment	93
Figure 6.3	Path Diagram of Influences on Teacher Satisfaction with Students	93
Figure 6.4	Path Diagram of Influences on Teacher Satisfaction with Workload	93
Figure 7.1	Trends in Quality of School Life Scores Across Year Levels	104

ACKNOWLEDGMENTS

This study was conducted as a co-operative venture of the Education Department of Victoria and the Australian Council for Educational Research. The sharing of perspectives and expertise of staff from the two organizations provided for a wider scope than could have been achieved separately. We wish to thank our colleagues who assisted in the formulation of plans, advised on the analysis and interpretation of data, and commented on the draft reports. For this help we acknowledge Margaret Batten, Jeff Clancy, Phil Creed, Robert Iles, Warren Jones, Phil McKenzie, Andrew Sturman, and Trevor Williams. We especially acknowledge the contribution of Robert Iles to the qualitative field work which was conducted as part of the study in late 1984.

The principals, staff, and students in the schools involved in the study were helpful in providing access, information, and insights on their schools. Those in the schools which were involved in the qualitative field work contributed considerable detail to the study. For the help of those people we are most grateful.

A number of ACER staff helped in the typing of the report and other documents. Heather Hale, Carol Greenwood, and Margaret Taylor were most directly involved in this process. For their care and attention to detail we record our thanks. In addition Mike Plunkett and the staff at the Swinburne Computer Centre facilitated the analyses; we appreciate that assistance.

John Ainley
Rodney Reed
Hilary Miller

October 1986

SUMMARY

Each year about two-thirds of a cohort of young people begin Year 7 in government secondary schools. Most of the students who began Year 7 in those schools in 1984 would be expected to remain in that school system for five years and, if present trends continue, more than half could be expected to complete six years of secondary school. The experience provided in government secondary schools is a significant component of the life of a large segment of the population. It deserves consideration in its own right as well as in terms of its immediate and long term outcomes.

This research report documents the results of a study of what happens in government secondary schools. It discusses aspects of the organization and curriculum of those schools, teachers' reports of linkages and co-ordination within those schools, teachers' job satisfaction, and students' views of the quality of school life. The study was conducted jointly by the Australian Council for Educational Research and the Education Department of Victoria and was intended to serve two main functions. The first was to describe patterns of organization in government secondary schools throughout Victoria. The second was to explore relationships between aspects of school organization, teacher job satisfaction, and the quality of school life. Although the first of these purposes was of mainly local interest to those involved in that school system, the second raised issues of more wide ranging interest in the general field of school organization and its effects. The framework which guided the exploration of these relationships was derived from that field of enquiry and the results of the study may contribute to its development as well as informing policy debate at local level.

The Schools

General Curriculum Patterns

Most schools were organized in a similar general pattern but with some interesting variations among a minority of schools. The general pattern, which has become accepted as traditional in secondary schools, was for teaching in year level groups in subject areas extending over one years duration. From Year 7 to Year 12 there was an increase in the range of student choice of study area. At Years 7 and 8 the program was most commonly described as one type of course based on a series of separate subjects, in Years 9 and 10 the most common description was that the program was a compulsory core and a series of electives (though the scope for options at this level was small), and in Years 11 and 12 programs were generally described as based on elective subjects or units (typically with about three times as many subjects being available as were needed for any individual student). As students progressed through the schools they studied a small number of subjects but had a greater choice.

Studies in Year 12

At Year 12 a little fewer than half the high schools offered only VISE Group 1 subjects, with a similar number of schools offering a mixture of VISE Group 1 and Group 2 subjects or Study Structures. Those which offered a mix typically provided about 15 Group 1 subjects and two or three Group 2 subjects (or an Approved Study Structure) from which to constitute a course of study. More than half the technical schools offered a course of study at Year 12, although this took various forms. That represents a considerable change from just a few years ago when most technical schools finished at the end of Year 11.

Variations

One variation from the traditional form of organization was the use of vertical grouping in the middle years. Typically this form of organization operated over Years 8, 9, and 10 although in a few schools Year 11 was involved. The student grouping arrangements were usually linked to curriculum structures under which students studied units lasting for one term or one semester rather than subjects extending over a full year. Students' courses were structured around these units and they were taught in groups which could include students from more than one year level. Schools which operated these systems had various ways of structuring the sequence of units in such a course including rules about prerequisites and course selection through individual guidance. Provision of adequate guidance in course design for individual students appeared to be a critical issue for this form of organization.

Decision Making

The study indicated that it is not appropriate to describe decision making in schools as centralized or decentralized without specifying the topic with which the decision was concerned. In general decisions about broad curriculum policies were taken centrally (although there was provision for staff to participate widely), instructional matters were decided at a subject department or individual teacher level (although there was considerable variation regarding internal assessment and homework policy), and administrative decisions were made either centrally or in a subject department. It appeared that the subject department remained a very important subunit within secondary schools and especially within technical schools. A majority of teachers were satisfied with their involvement in decisions about school policy and nearly all were satisfied with their freedom to select teaching methods. However, fewer than half agreed that curriculum co-ordination in their schools was sufficient or extensive. Questions of how various decision-making structures in secondary schools relate to each other, and the ways in which school activities are co-ordinated remain important for

further research. The present study suggested that there were a number of ambiguities in this area.

The Teachers

Communication and Program Co-ordination

The extent to which teachers regarded the school curriculum as effectively co-ordinated was influenced by the frequency of interaction among staff. The frequency of interaction among staff as measured in the present study was, in turn, greater in smaller schools than larger schools. Teachers in technical schools reported more frequent communication than teachers in high schools (although it was mainly concerned with student welfare and directed to the subject co-ordinator) but less effective co-ordination of the curriculum. No simple interpretation of this is obvious although it does seem consistent with the view that the presence of strong subject departments can limit co-ordination across different components of the curriculum unless other co-ordinating structures also exist. Such a view was expressed in a recent review of high schools in the Australian Capital Territory.

Teachers' Job Satisfaction

The study considered three aspects of teachers' job satisfaction; satisfaction with the organizational environment, satisfaction with students, and satisfaction with workload. The extent to which the curriculum was seen as being co-ordinated (and hence those factors which influenced co-ordination) influenced teacher job satisfaction with the organizational environment. In schools where teachers saw the curriculum as being more cohesive they expressed greater satisfaction with their organizational environment. Teachers' job satisfaction with students and with their workload were not found to be influenced by school level organizational factors. Satisfaction with students was related to the social composition of the school (the higher the socioeconomic status the higher the satisfaction) and the type of school (teachers in high schools were more satisfied with their students than were teachers in technical schools). Satisfaction with workload was influenced by school size. Other thing equal, the smaller the school the greater the level of satisfaction expressed by teachers with their workload.

Two items on which teachers expressed low levels of satisfaction concerned the opportunities for in-service education and the availability of advice about problems in teaching. The first of these relates to the system as a whole but the second is probably connected to the organization within schools.

Students' Views of the Quality of School Life

Students' Year Level

The most pervasive of the student characteristics influencing quality of school life was their year level. Student responses to the quality of school life questionnaire showed different trends across Years 7 to 12 in different aspects of school life. In two areas, identity (a sense of social integration) and status (a sense of worth), there was no significant variation from Year 7 to Year 12. Student responses in terms of positive affect (general satisfaction with school) and teacher-student relations followed a U-shaped trend: there was a decline from Year 7 through the middle years followed by a rise to Year 12. In the three remaining areas of the questionnaire - opportunity (a sense that school work is relevant), achievement (feeling successful), and negative affect (a sense of loneliness and depression) - students' views became progressively less favourable from Year 7 to Year 12. Opportunity and achievement were two dimensions of the quality of school life scale most related to the curriculum. The results suggested that in general students found the curriculum less relevant to their interests in the later years of secondary school than the early years and that they also felt less successful in those later years.

Other Student Characteristics

There were some differences in views of the quality of school life according to sex and ethnic background. Girls rated the quality of school life higher than did boys in terms of general satisfaction with school and in terms of identity or social integration. Students whose fathers were born in Southern Europe or Asia rated their general satisfaction with school (positive affect) and their sense of worth at school (status) more highly than did other students which possibly reflected a higher value placed on schooling by those communities. The results for negative affect were not so unequivocal but tended to show a different pattern and could reflect problems faced by these students outside the formal school organization.

School Organizational Factors

There were no major and consistent differences between students from high and technical schools in the quality of school life scores which could not be attributed to differences in the nature of the population of the two types of school. Nor were there differences in the quality of school life scores among students in the middle years according to whether their school operated vertical grouping or more traditional year level arrangements. It was in the more detailed aspects of school organization that there was found some influence on the quality of school life. When an allowance was made for the influence of other characteristics of students and their schools the extent

to which staff communicated with each other about curriculum and student welfare issues was found to have a small net influence on students' general satisfaction with school, and some other aspects of the quality of school life. In other words when the level of communication among staff was high there was greater general satisfaction expressed by the students.

Year 12 Curriculum

At Year 12 there were differences between students in different types of course on the opportunity subscale which referred to a sense that the work studied was relevant to their interests. Students in courses designated as alternative (an Approved Study Structure, a Technical Year 12, or a set of VISE Group 2 subjects) rated the opportunity or relevance aspects of school life more highly than students in traditional courses (a set of Group 1 subjects alone or in combination with a few Group 2 subjects). These alternative courses, although different from each other in some ways, embody similar principles through which an explicit attempt is made to match course content to the aptitudes and interests of students. In addition high school students undertaking an Approved Study Structure rated school life more highly in terms of achievement (or feeling successful) than did high school students in traditional courses. Technical school Year 12 students rated school life more favourably in terms of negative affect than did other students. In general such results are best interpreted as indicating the need for a range of programs at Year 12 which recognize the diverse aptitudes and interests of potential students rather than as indicating that any one course is the best.

In General

The study found that patterns of school organization could influence the quality of school life for teachers and students in small but significant ways. For teachers satisfaction with the organizational environment was enhanced when they saw the curriculum as well co-ordinated and when there was frequent communication among staff. Students viewed the quality of school life as higher when the curriculum recognized their diverse aptitudes and when the level of communication between their teachers was high.

SECTION 1

SETTING THE SCENE

This introductory section outlines the background to the study (Chapter 1), describes the framework within which it is set (Chapter 2), and provides a brief overview of the strategy and methods used in the investigation. (Chapter 3)

CHAPTER 1

CONTEXT

In 1984 just over 50,000 young people began Year 7 in Victorian Government secondary schools to become part of the one-quarter of a million students in these schools. Overall these schools catered for a little more than two-thirds of the secondary school population in Victoria. Most of the students who began Year 7 in a government secondary school in 1984 would be expected to remain in that school system for five years and, if present trends continue, more than half could be expected to complete six years of secondary school. The experience provided in government secondary schools is a significant component of the life of a large segment of the population. It deserves consideration in its own right as well as in terms of its immediate and long term outcomes. As Jencks and colleagues commented some time ago:

> Some schools are dull, depressing, even terrifying places, while others are lively, comfortable, and reassuring ... such differences are enormously important and eliminating these differences ... would do a great deal to make the quality of children's (and teacher's) lives more equal. Since children are in school for a fifth of their lives, this would be a significant accomplishment. (Jencks, et al., 1972:256)

This report is concerned with what happens in secondary schools. It discusses aspects of the organization and curriculum of those schools, teacher reports of patterns of co-ordination and linkage within schools, and student views of the quality of school life. In addition it attempts to explore some possible associations between the social background of students, characteristics of their schools, and views of the quality of school life.

Administrative Patterns in Government School Systems

Since they were established about 100 years ago the state education systems of Australia have been characterized as highly centralized and tightly integrated (see Kandel, 1938; Butts, 1955; Jackson, 1962). Under these circumstances it would be expected that the organization and curriculum of the schools in those systems would be fairly uniform. In fact part of the argument advanced in favour of centralized systems of education at the time they emerged was that they would ensure uniformity of teaching (see Austin, 1961). As education systems become decentralized one would expect greater interest in the differences in school operations and the way those differences influence student experiences.

From the late 1960s and early 1970s the administrative structures of Australia's state education systems have undergone considerable change. Of greatest relevance to the present study is the increased devolution of authority to schools. Several observers

have concluded that, at least in terms of the formally stated responsibility for curriculum in the compulsory school years, the changes in Victoria have been amongst the most extensive in the nation (Deschamp and McGaw, 1979; McKenzie and Keeves, 1982; Dow, 1985). McKenzie and Keeves concluded the description of the extent of devolution of curriculum responsibility in each state with the following summary of the situation in Victoria:

> In Victoria ... while general aims and curriculum objectives have been stated by the central Curriculum Branches, the schools have the freedom to restate the aims of schooling in their own terms and to redefine the curriculum objectives to satisfy their own conditions and circumstances and to fulfil the aims of the school. Thus the prevailing strategy is one of development of both the aims and the curriculum at the school level, and the school selects and organizes content and uses teaching methods that are in accord with the chosen aims and objectives. (McKenzie and Keeves, 1982:24)

As part of the reflection on the emergence of the idea of school-based curriculum development, Dow (1985) recalled that this idea emerged in secondary schools as part of a response to the problems associated with providing an appropriate curriculum for a broader secondary school population in a changing social context. Dow argued that structural and curriculum change are intertwined. Another major participant in the changes that occurred in Victoria (Reed, 1976) stressed that, in developing curriculum responses, even though principles of curriculum and organization might be defined on a general basis, the application of those principles 'would be a matter for the schools themselves'. That sentiment has since been incorporated in a Ministerial policy statement applying to all Victorian government schools (Victoria, 1983). Devolution of curriculum responsibility provokes additional interest to the extent that it may lead to variations in school organization and curriculum, and to the extent that such variation is associated with differences in school operations and student responses.

Some General Features of Secondary Schools

The changes already noted in the administration of state education systems occurred at a time when those systems moved from being predominantly concerned with elementary education to having a substantial involvement in the provision of secondary education. In 1951 only 21 per cent of all students in government schools in Victoria were enrolled in secondary schools. By 1984 that figure had increased to 44 per cent. Some observers have linked the trend towards a greater devolution of authority to schools with a more overt expression by teachers of their professional responsibility (Bassett, 1976) or to an influx of more highly qualified teachers to the profession (Fitzgerald, 1972). Such an interpretation could be extended to the increased significance of the secondary area of state education. Many new teachers who entered that sector at this time based their authority on a different pattern of training than had been experienced by their

predecessors in either the elementary or secondary teaching professions. Dow (1985) attributes some of the changes which occurred in the specific context of Victoria to the role of the teaching profession and teacher organizations.

There is evidence, both overseas and local, to suggest that secondary schools function differently from primary schools. Staff in secondary schools exhibit less consensus about the goals of the school (Herriott and Firestone, 1981; Firestone and Herriott, 1982), subunits of secondary schools have greater responsibility for decisions than do those in primary schools (Ainley, 1983), and there is less centrality of influence with regard to instructional decisions in secondary schools (Ainley, 1983). Interpretations of these organizational differences have included the different authority bases of teachers and principals, the complexity of curriculum structures, the extent of differentiation of function among staff, and the forms of accountability which apply in the different schools. In addition there is some evidence, based on data supplied by school principals, that the patterns of internal school co-ordination differ between the secondary schools of different state systems (Ainley, 1982). In less centralized systems, for example, there is a tendency for secondary schools to invoke more horizontal (i.e. within year levels) co-ordination structures compared with schools in more centralized systems where the more traditional vertical (i.e. within subject departments across year levels) co-ordination tends to be more predominant.

The Study

The emergence of devolution of authority is not the main concern of the present study. The brief discussion of devolution above is included largely to establish the context in which it is set. Two elements of the context are important. First, the study is set in an education system which is widely seen as having embraced the principle of devolution of authority to schools. Second, the study is set in secondary schools which are often seen as being more independent of systemic control (except for the influence of public examinations) and which are regarded as being more loosely co-ordinated than primary schools. These two aspects of the context might be expected to provide scope for ample variation in the organizational features of schools.

The study is concerned with both description and analysis. Through its descriptive component the study seeks to outline patterns of organization in Victorian government secondary schools. As such it describes both general patterns and the extent to which there are variations from the general. In one sense the descriptive part of the study could be seen as being mainly of interest to Victorians. However, it has wider significance in that it details the way schools are organized within a system which espouses the principle of devolution of authority to schools. The descriptions provide some insight on such issues as whether decisions are made at a school level or within a

subunit of the school, the extent to which there is curriculum diversity among schools, and whether school programs incorporate structural integration of the individual components.

The analytic component of the study addresses more general issues of significance to the field of school organization and its effects on teachers and students. It makes use of the natural variation among the government secondary schools in Victoria to explore propositions about school organization derived from the research literature. In particular the study is concerned with the influence of school organization on teachers' job satisfaction and students' quality of school life. Two aspects of school organization envisaged as potentially influencing these outcomes are the extent to which the school curriculum is co-ordinated, and the frequency of communication among staff. Both the outcomes mentioned above and these organizational features are considered in relation to school characteristics such as size and the social composition of the school population.

Although the descriptive and analytic components of the study are described separately in the sections above, and are reported largely in separate sections of the report, they are intertwined in the study. Inferences drawn about particular relationships are able to be informed by the detail of the context which assists in judgements about the appropriateness of generalizing conclusions more widely. Moreover both the descriptive and analytic components of the study involve quantitative and qualitative methods of investigation so that each can complement the other.

The Report

In this study an explicit connection is made between several aspects of organization in post-primary schools in Victoria. These features of school organization are then explored in relation to the affective responses of students and teachers, and in relation to characteristics such as size and type of school.

Section 1 of the report is concerned with the origins, conceptualization, and conduct of the study. Chapter 1 has briefly presented some information about the context of the study. That context is relevant to the way the study was designed and to the way its conclusions might be interpreted.

Chapter 2 outlines the way the issues are conceptualized in a framework which guides the conduct of the study while Chapter 3 describes the strategies and methods used in the study. Much of the technical detail which would normally be presented in a chapter such as Chapter 3 of the report is contained in Appendix 1. Those who wish to judge the validity of the conclusions presented will need to consult that appendix since only a brief outline of methodology is provided in the main report.

Section 2 is concerned with school organization and management. It consists of two chapters. Chapter 4 is mainly descriptive and focuses on the organizational and

curriculum arrangements in Victorian government secondary schools. Information about general patterns of school and curriculum organization and differences across schools is drawn from a survey of all schools. Descriptions and discussions of particular school operations are based on fieldwork in a small number of schools. Chapter 5 is concerned with some aspects of decision making. It looks at the structures within which decisions are made and some of the links between those structures. The evidence for this chapter is drawn from a teacher questionnaire and from interviews in schools.

Section 3 focuses attention on the affective outcomes of schooling in terms of student quality of school life and teacher satisfaction. It consists of three chapters. In Chapter 6 data concerning teacher job satisfaction are presented and linked to school characteristics and organization including the extent of co-ordination in schools and the communication between staff. Student's quality of school life is the focus of Chapter 7. Various domains of the quality of school life are discussed in relation to student characteristics, features of school organization and curriculum structures. Chapter 8 is a general concluding chapter bringing together elements from various sections of the study.

CHAPTER 2

A FRAMEWORK FOR THE STUDY

This study is concerned with two main aspects of Victorian secondary schools: school organization and curriculum, and the responses of the students and teachers to their school environment. Overall the study investigates the proposition that aspects of school organization and curriculum influence the perceptions held by students and teachers of the quality of school life. No study could adequately address the wide range of issues subsumed within these all-embracing terms and consequently the present study is restricted to specific features within this broad framework. The selection of particular features for investigation is based on both practical and theoretical considerations. The practical considerations provided the starting point for the study and arose from discussions with the authority which requested the study: the Victorian Education Department. Those considerations involved the effects upon students of vertical grouping in the middle school, and the effects of different curricula in the senior school, as well the more general issue of how schools were co-ordinated. The theoretical considerations (though this is possibly a little too grand a term) entered through reference to the literature concerned with school organization. Ideally one might begin with the practical concerns and use the perspectives from other research literature to help formulate those concerns in a way which would render them amenable to research. In practice the process of defining the elements of an investigation is rarely so neat. Typically what happens is an interaction between practical and theoretical concerns in a rather more haphazard manner.

The General Framework

In presenting the general framework for this study four main elements of interest are distinguished; system factors, student characteristics, school level factors, and affective outcomes:

System factors. These refer to aspects of schools over which they exercise very little control, even though these factors may shape the responses of students and teachers. In this study such factors as the size, location (city or country), and type of school (technical or high school) were investigated. These are not necessarily immutable contextual variables since the education system could manipulate some of these factors through its policies and practices. However, they are not factors which could be altered by any given school.

Student characteristics. The study investigated several student characteristics which might be considered to influence perceptions of the quality of school life.

These include aspects of their social background (which in aggregate might be taken as part of the social environment of the school's location), sex, and year of schooling.

School-level factors. These refer to those features of a school organization or curriculum which are in principle able to be determined within the school. The school factors can be considered as being comprised of several different types of variable. They are divided between decision-making structures, structural coupling (the linkages among staff) and co-ordination, and policy-implementation structures (referring for example to student grouping and curriculum structure). It is not suggested that these elements are unconnected but merely that this is a convenient way to begin a conceptualization of the relationships which may exist. In designating these as school factors, it is not suggested that they exist in the absence of powerful constraints from outside the school, but that in principle the shape of these features is moulded within the school.

Affective outcomes. These refer to students' views of the quality of school life and teacher satisfaction with the organizational environment of the school. Both concepts are elaborated in greater detail below. The framework for this study is represented diagrammatically in Figure 2.1, where the main elements discussed above are shown in the blocks along with the factors which make up these elements. The postulated relationships investigated in the study are encompassed by the convention that any block of factors can be potentially influenced by the block or blocks to its left. The sections which follow elaborate the main elements of the framework and the nature of some of the hypothesized relationships between them.

System Factors

This group of factors encompass potential influences on the quality of students' school experiences which arise from the nature of the education system generally rather than at the school level. In this section the main system factors considered in this study, namely size, location, and type of school, are described.

Size of School

Arguments concerned with the size of schools often centre around two contending claims. On the one hand it is argued that a more comprehensive curriculum can be offered in large schools, and on the other it is suggested that greater intimacy and richness of experience can be provided in small schools. In the United States the arguments advanced by Conant (1959) for establishing larger secondary schools in order that the curriculum could be more comprehensive, were influential in policy formulation

School level factors

Affective outcomes

1 System Factors
- School Characteristics
- Size
- Location
- Type

3 Structural Coupling
(a)
- Teachers
- Co-ordinators
- Administrators

(b)
- Student welfare
- Curriculum

5 Co-ordination

7 Teacher Job Satisfaction
- Organization
- Students
- Working conditions

2 Student Characteristics
- Socioeconomic background
- Ethnic background
- Sex
- Year level

4 Decision Making Structures

6 Policy Implementation Structures
- Organizational structures
- Curriculum structures

8 Student Quality of School Life
- Postive affect
- Negative affect
- Teachers
- Status
- Identity
- Opportunity
- Achievement

Figure 2.1 A Framework for the Study

in that country (Skidmore, 1981). Recently, in Victoria, the issue of school size has been raised in the context of the Ministerial Review of Post Compulsory Education (Victoria, 1985) where it was argued that the Year 11 and 12 group in most schools was too small to offer a comprehensive curriculum.

One reviewer of research concerned with the effects of school size has suggested that there is little evidence to support the proposition that school size is associated with large effects on achievement but that there may be influences on other outcomes (Skidmore, 1981). Research studies conducted by Barker and Gump (1964) suggested a negative relationship between school size and the richness of the experience of students; they argued that this arose because of differences in the social environment of large and small schools. Campbell, Cotterell, Robinson, and Sadler (1979) explored some of the propositions derived from this area of research in a sample of Australian primary schools and reported that students in small schools experienced a richer environment than their peers in large schools, perceived the environment as more supportive, and felt a greater sense of cohesion and concern for other people. Research reported from the United States in senior high schools has tended to support some of these findings. Of course, any interpretation of studies conducted in the United States needs to take into account the possibility that the term 'large' in that context would be very large by Australian standards. Students in smaller schools were more likely to participate in a wider range of activities (Lindsay, 1982) and, after controlling for a number of confounding influences, higher levels of participation in high school had a small but significant influence on community participation among young adults (Lindsay, 1984). Several studies have suggested a small positive association between school size and disorder (i.e. turbulance and behaviour problems) (e.g. McPartland and McDill, 1977).

Two theories have been offered as interpretations of this pattern of results. One suggests that larger schools produce less positive attitudes and more disruption because a smaller percentage of the student population can fully participate in meaningful activities (Barker and Gump, 1964). This has sometimes been called 'manning theory'. An extension of this approach argues that participation in varied activites can be important in bonding marginal students to the social order of the school (see Hirschi, 1969). A second theory proposes that the link between school size and student attitudes is through school administration. It suggests that administrative practices are more cumbersome and less effective in large than small schools (Gottfredson, 1985).

The present study includes a consideration of the potential influence of school size both because this issue has arisen as being of practical importance and because research literature suggests that there may be an association between school size and student attitudes to school. Moreover, the study provides an opportunity to test the extent to which any such influence might be linked through the mediating effect of school administrative policies and procedures.

Type of School

A number of different types of school make up the secondary school system in Victoria with the main ones being high schools and technical schools. In local parlance the nomenclature 'post primary' is used to refer to all the schools which operate at this level and uses secondary to include high schools, higher elementary schools, and a few other schools. The present report uses secondary as a generic term to cover this level of schooling so that its terminology is consistent with that of other Australian states, to avoid the complexities of language implicit in describing the level beyond secondary, and to avoid confusion with the new Post Primary Schools in which the term has a specific rather than a generic meaning.

Around 1950 a technical school system was established and operating in each Australian state but by 1980 it was only in Victoria that a substantial technical school system remained. Just over one quarter of all Victorian government secondary school students are in technical schools with the proportion of male students in these schools being even greater (38 per cent). Technical schools had originally been established in order to provide a more vocationally oriented education than high schools. Recent documents concerned with the operation of technical schools have indicated a broadening of their educational program so that the first three years are devoted to a general education which is fairly similar to high schools, with the next two years having a more vocational orientation (Victoria, Education Department, Technical Schools Division, 1979). Until recently most technical schools offered only five years of secondary education, although some served as providers of TAFE courses. Since 1982 an increasing number of technical schools have provided Year 12. A major difference between technical and high schools relates to the characteristics of the teachers. Around two-thirds of the teachers in technical schools have had substantial industrial or commercial experience before commencing teaching. They tend therefore to be older than high school teachers when they start teaching and to have a different background. Hence, differences in the environment of high schools and technical schools could arise from the different traditions of the two types of school or from differences brought to them through the backgrounds of their staff. The purpose of including this aspect of secondary schooling in the study was to test whether students perceived any differences between the two types of school.

Student Characteristics

Three types of student characteristics, potentially related to students' affective responses to their experience of secondary school, were included in the study. These were the social background of students (specifically their socioeconomic and ethnic background), the sex of students, and the year level in which they were enrolled.

Inclusion of these variables in the study served two purposes. First, it allowed controls to be introduced when examining relations between school level factors and affective outcomes and second, associations of affective outcomes with these factors were of interest in themselves.

Social Background

Both socioeconomic and ethnic background might be expected to be related to student views of their school experience. Many studies linking socioeconomic status with achievement have been summarized in a meta-analysis reported by White (1980). The results showed a consistent, although modest, positive association between socioeconomic status and achievement, though the association is not as large as popular literature would suggest. Keeves (1972) argued that this association emerges as a result of the home practices and expectations being conducive to achievement in school. A similar association exists between socioeconomic status and participation in post-compulsory education. Beswick et al. (1983) argued that this is likely to arise from differences in parental encouragement as well as from differences in wealth. These interpretations are not inconsistent with that reached from a different perspective by Connell et al. (1982). Those authors pointed to an incongruity between the culture of most schools and the home background of working-class students.

On these bases one might expect socioeconomic background to be associated with perceptions of school life: students from home backgrounds of higher socioeconomic status would express more positive attitudes to school.

A number of studies have suggested that students of non-English speaking background (usually based on the birthplace of their parents) tend to remain at school longer than their peers of Australian or other English speaking backgrounds (see Ainley, Batten and Miller, 1984a; Williams and Clancy, 1985). This has often been attributed to the high aspirations held for those young people by their parents (see Taft, 1975); this interpretation is consistent with the observation that the effect is larger for males rather than females (see Ainley et al., 1984a). Given evidence of both higher levels of participation and higher parental aspirations, one might expect to observe more positive attitudes to school among students of a non-English speaking background than among their peers of an English speaking background. Some evidence for this was found, especially among male students in Years 10 and 12 in a limited sample of Victorian schools (Ainley et al., 1984a). The present study tested that relationship more fully across a wider range of schools and over all year levels. In addition it considered ethnic background in more differentiated subgroups than those referred to in the study above. If the interpretation of differences between students from Australian background and non-English speaking background relates to aspirations, it seemed logical to examine differences between students whose parents came from different parts of the world.

It is interesting that, for both aspects of social backgound reviewed above, a common explanation suggested by the literature concerns parental expectations or aspirations.

Sex of Student

Epstein (1981) reported that some studies have shown more positive attitudes towards school among females than males but that the differences were not consistent. It has also been observed that female students get better reports, cause fewer discipline problems, and do more homework than males which, Epstein suggested, could be related to differences in attitudes to school as either cause or effect. Recent Australian experience has seen a relative growth in the retention rates to Year 12 of females compared with males. Various interpretations have been offered, including relative labour market opportunities and changing community attitudes towards the education of females. Such changing community attitudes, reflected in higher expectations and aspirations, could be associated with more positive attitudes to school. In addition to regarding school as important, attitudes to school could be linked to other differences between male and female students. One theory proposes that males tend to emphasize 'individuation', that is, separate individual action, whereas females emphasize 'connectedness' through which networks of relationships assume greater importance (Gilligan, 1982). On that basis one might expect females to find the environment of schools more convivial than males.

Year Level

Epstein (1981) noted that there is a general tendency for student reactions to school life to become less positive over time. It is not clear whether this tendency arises from a general decline in the 'objective' quality of school life, or from an increased tendency of students to be critical. Epstein surmises that the explanation could result from an increased differentiation of student interests and aptitudes in the later years of school which is not able to be matched by school programs. On the basis of evidence gathered from Victorian high schools about student views of different types of courses, that interpretation seems plausible. The present study examined trends in student views of different aspects of school life across year levels and different types of course in the senior school.

School-Level Influences

In considering school-level influences on affective outcomes three types of influence were distinguished; those arising from policy formulation, those arising from structural coupling and co-ordination, and those arising from the structures through which the

school's policies are implemented. The first two of these are concerned with aspects of school management but at different levels of detail. Policy formulation, in the sense used in this study, is concerned with the structures through which some types of decisions are made: namely those concerned with the curriculum and aspects of administration. Structural coupling refers to the linkages between subunits and individuals within the school, and co-ordination refers to the overall co-ordination of the school program. Structural coupling and co-ordination concern not just policy formulation but the operation of the school. The third of the potential sources of influence are the structures within which the school program is arranged: these have been designated as policy implementation structures.

Policy Formulation Structures

One would expect any influence of policy-formulation structures on students to be indirect rather than direct. Such influences would be expected to operate through linkage, co-ordination, or teacher satisfaction. Some research conducted in primary schools suggested that greater participation in planning and decision making yields enhanced teacher satisfaction and resulted in lower absenteeism (Morhman et al., 1978; Bridges and Hallinan, 1978), and that teacher satisfaction is lower where teachers perceive a high degree of bureaucracy (Ratsoy, 1973). Similar results have been reported in secondary school where more bureaucratic structures have been found to be associated with lower levels of teacher satisfaction (Benson, 1963; Isherwood and Hoy, 1973). The present study explored these issues further. It conceptualized decision-making structures in terms of the issue considered, the level at which decisions were made, and the extent of participation in the process. It also considered whether any subunits involved were oriented towards horizontal or vertical co-ordination.

Structural Coupling

One of the key focuses of research and theorizing about school management in recent years has involved the mechanisms and methods of co-ordination (Meyer, 1978). Some of the literature concerned with school organization has suggested that more positive student attitudes to school could be attributed to strong linkages between teachers (Minkel and McDonald, 1982), that less student conflict exists where students experience a strong, consistently articulated framework (Metz, 1978), and that teacher satisfaction is enhanced where teachers are involved in collaborative planning (Bridges and Hallinan, 1978). Recent research in Australia suggests that among the common elements present in secondary schools responding successfully to the challenges of the eighties are staff cohesiveness, staff identification with the program, and involvement of staff in the decision-making process (Batten, 1983). In the light of these suggestions it might be expected that stronger cohesiveness among staff could lead to an enhanced quality of

school life for students. Thus the rationale for examining cohesiveness and communication is primarily to investigate whether those factors relate to teacher satisfaction and student quality of school life.

In considering co-ordination the study draws on the notion of structural coupling, which has been defined as the mechanisms and norms of interaction among individuals in a system which bind the parts of that system together (Miskel and McDonald, 1982). Sometimes that general concept has been subdivided in order to separate structural coupling within the operating core of a school (i.e. between teachers) from structural coupling linking the administration with the operating core (Miskel and McDonald, 1982). This distinction arises from studies in primary schools. For secondary schools, subunits assume a greater significance than in primary schools. Hence, this study introduces an additional distinction by considering structural coupling between teachers and the equivalent of 'middle management' (a subject department head or a year-level co-ordinator). In addition, it invokes some consideration of the nature of the interaction by allowing that there may be different levels of interaction on matters of say curriculum and student welfare. Consequently, the study begins with a multifaceted concept of structural coupling rather than a single dimension.

Co-ordination

Presumably, because structural coupling is conceived in terms of interactions, a common approach to its measurement has been to examine the frequency of interaction between staff about various issues. Another approach to the issue of cohesiveness (sometimes also called structural coupling) is to adopt a more global view and deal with teachers' perceptions of the extent of co-ordination in a domain such as curriculum or discipline (see Hoy, 1979). Even though this approach is often considered to be based on similar notions to structural coupling there are some important differences in the way each is operationalized. A school may be seen as well co-ordinated for reasons other than the frequency of communication. For example, a principal could provide co-ordination by exercising authority through what Firestone and Wilson (1983) refer to as bureaucratic linkages (such as direct decisions about groupings or teacher assignments) or cultural linkages (promoting collectively accepted meanings, beliefs, values and assumptions). The present study is concerned not only to distinguish frequency of interaction from overall co-ordination but to explore the relationships between these two aspects of school organization.

Policy Implementation Structures

Policy implementation structures, which are divided into organizational grouping structures and curriculum structures, refer to the broad framework within which a school's program is implemented.

Organizational structures could include a range of student grouping arrangements and patterns of teacher allocations. One main thrust of the present study focuses on the influence of vertical grouping arrangements in the middle school. Arrangements based on vertical grouping in the middle years (8, 9 and 10) exist in a number of Victorian secondary schools so that the question of their influence on students is of some practical consequence. Possibly the experience of schools at this level could inform the prospective development of a similar approach at Years 11 and 12. Secondary schools which have introduced vertical grouping have done so for various reasons (see Sturman, 1982). These include the desire to offer the most comprehensive possible curriculum within resource constraints; a belief that such an arrangement, combined with semester or term length units, allows the school to devise a more appropriate curriculum for each student and allows a rate of progression more closely matched to the students mastery of each unit; and a belief that including a wider spread of age levels in each class provides advantages for both educational and social development. On the basis of those presumptions it could be expected that vertical grouping arrangements might influence student attitudes to school. The study investigates the extent to which that influence is reflected in student views of school life.

The study also included an examination in particular schools of two other issues which could be considered organizational structures in this sense. The first is the operation of subschools which were devised to provide a set of smaller units to which students could affiliate and to offer different styles of curriculum within the one school. The second was the operation of a shared campus at Year 12 between three neighbouring schools to provide a more comprehensive range of studies at that level for the students coming from each of the individual schools.

Curriculum structures were included in the study at two levels. At Year 12, the study considered the attitudes expressed by students undertaking different types of course to a variety of aspects of school. Those courses (e.g. VISE Group 2, Technical Year 12) were established in order to respond better to a more diverse student population in the senior school. In addition those courses might have been inclined to attract students who would otherwise have left school. The question addressed in this study is whether or not the students in those courses express more favourable attitudes to their school experiences than students in traditional courses. Because of the current interest in the senior school this issue receives greater emphasis than curriculum structures in other levels in the present study. For levels other than Year 12, less detailed information about curriculum structures was available. At those levels only broad descriptors of the curriculum could be utilized.

Affective Outcomes

The affective outcomes with which this study was concerned related to both teachers and students. As the relationship of teachers to a school differs from that of students, the conceptual base for the affective outcomes of each also differs.

Teachers

The approach to teacher satisfaction is grounded in the work of Holdaway (1978). Holdaway began with a theory of job satisfaction and comments of teachers about aspects of their job which made them satisfied or dissatisfied. From that beginning he developed a notion of teacher job satisfaction based on a general construct and a series of domains or facets. Subsequent refinements of the Holdaway approach in Australian contexts have suggested that three facets of teacher satisfaction can be separately identified (Fordham, 1981; Ainley et al., 1984a; Bourke, 1984): satisfaction with the organizational environment of the school, satisfaction with students, and satisfaction with working conditions. It is the first of these which relates most logically and directly to the school-level influences discussed above, and it is measures of this aspect of teacher satisfaction which receive the greatest attention in this study.

Students

The approach to the affective responses of students is based on the conceptualization of the quality of school life reported by Williams and Batten (1981). Williams and Batten developed a model of the quality of life within schools from the perspective of students. The model was an analogue of the more general quality of life model found in the literature on social indicators. It distinguishes general feelings of well being (positive affect), general negative feelings (negative affect), and feelings related to specific domains of school life. This approach was derived from a theory of schooling developed by Mitchell and Spady (1978) and was refined after empirical testing of specific propositions derived from the theory. As a result, the approach embodied five specific domains of schooling:

Achievement:	A sense of confidence in ones ability to be successful in school work.
Opportunity:	A belief in the relevance of schooling.
Status:	The relative degree of prestige accorded to the individual by significant others within the school.
Identity:	A sense of learning about other people and getting along with other people.
Teachers:	A feeling about the adequacy of the interaction between teachers and students.

The model does not envisage the domains as being independent of each other but that together they constitute a view of the elements of the quality of school life for students. A questionnaire based on this model has been tested extensively so that there is empirical evidence to support this structure of the quality of school life (Batten and Girling-Butcher, 1981; Williams and Batten, 1981, 1982). The separate domains within the model are important to the present study as they enable more detailed examination of relationships than would be possible if the quality of school life was conceptualized as a global and undifferentiated concept.

An Overview

The framework which guides the present study assumes a sequence of influences based on an interpretation of previous research findings. The study sets out to test the validity of these assumptions. According to the framework set out in Figure 2.1 the communication linkages among staff (referred to as structural coupling) may be influenced by characteristics of the school and its student population. The effectiveness of the co-ordination of the school program is seen as influenced by the amount of communication and the background characteristics of the school and its students. Teacher job satisfaction and student quality of school life are seen as the potential culmination of these influences. The study does not proceed to test all the factors in the framework simultaneously. Rather it uses that framework to guide a series of analyses designed to explore elements, relationships, and sets of relationships.

CHAPTER 3

STRATEGIES AND METHODS

This study draws its data from three main sources. These are a survey of organizational and curriculum arrangements in secondary schools conducted in July 1984, a study of teachers and students in a sample of about 50 schools conducted in October 1984, and a series of studies based on field work in a selection of schools representing specific features of interest to the study. Greater detail of the strategies and methods involved in each of these three phases of the whole project is contained in Appendix 1.

The Initial Survey

The initial survey was concerned with curriculum and organizational arrangements in the government secondary schools of Victoria in 1984. Two survey forms were used, one devised for high schools (including the secondary sections of higher elementary, consolidated, and central schools) and another for technical schools. Most of the questionnaire content was common for each form; the differences arose in the questions related to Year 12. The questionnaires were sent to all secondary schools in the State and a response rate of 97 per cent was obtained from both high schools and technical schools. Details of the responses are contained in Appendix 1, and a copy of each questionnaire is included in Appendix 2.

The Fifty School Study

The fifty school study was based on information gathered from students and teachers in 53 schools sampled from the population of Victorian government secondary schools (50 was the target on which the sampling fractions were calculated). That information was used in conjunction with data gathered in the initial survey to provide a basis for examining the relations between the factors described in the previous chapter. In this section a brief description is provided of the teacher and student questionnaire, and of the sampling procedures. Copies of the questionnaires are included in Appendix 2.

Teachers

The questionnaire to teachers was designed to elicit information about linkages within the school, perceptions of co-ordination, and levels of satisfaction. In addition it sought background information about such matters as teaching experience, teaching allotment, and organizational responsibilities.

Structural coupling. Information about linkages with other teachers was based on a modified form of a scale concerned with work system interdependence developed by Bridges and Hallinan (1978). Basically it asked teachers to indicate how frequently they engaged in various activities with other teachers (e.g. jointly plan lessons). Teachers could respond by ticking one of a series of boxes ranging from 'every day' to 'once per year' or 'never'. The present study found the scale to be statistically reliable with some indication of a partial separation between items concerned with planning and items concerned with action. Information about communication with a subject co-ordinator, a year level co-ordinator, and the principal or vice-principal was obtained by a similar method. Teachers were asked how frequently they talked with each of these people about a range of issues. The approach was originally developed by Meyer and Cohen (1971) although the present study included a considerably wider range of topics to which teachers could respond. The topics were intended to embrace instructional issues (e.g. 'general curriculum plans') and student welfare issues (e.g. 'student behaviour in class') and there was some empirical support for that distinction in the results. Evidence suggesting that the original forms of these instruments were reliable and valid had been reported as a result of studies in elementary schools (Miskel et al, 1981). The study found the modified forms of these scales, in general, to be statistically reliable in secondary schools.

Co-ordination. The effectiveness of co-ordination of the school program, as perceived by teachers, was assessed by using a seven-item Likert scale. This scale was adapted from a form developed by Hoy (1979). Teachers could respond to each item by ticking one of four boxes labelled 'definitely agree', 'mostly agree', 'mostly disagree', and 'definitely disagree'. Typical of the items was the statement 'there is effective co-ordination of the curriculum'. A principal component analysis showed that there was only one underlying dimension present. The value of coefficient alpha was 0.85.

Teacher job satisfaction. The final part of the teacher questionnaire was concerned with teacher job satisfaction and was structured around the domains discussed in Chapter 2. The study identified two separate and distinct subscales concerned with the organizational environment and with students, but suggested that the third hypothesized subscale (working conditions) could best be considered as comprising two further elements (work load and support services). The subscales related to organizational environment, students, and work load were shown to be statistically reliable. The fourth subscale concerned with support services had a low reliability.

Students

The questionnaire to students was primarily concerned with obtaining student perceptions of the quality of school life. In addition to gathering those data it also

provided information about social background (parental occupations, ethnic background), current education (type of course, names of subjects being studied), self-assessment of ability, and future educational and occupational plans.

The measure of the quality of school life was based on a 40-item questionnaire in the form of a self-report Likert scale. Students were asked to indicate on a four point scale ranging from 'definitely disagree' to 'definitely agree', the extent to which they agreed with a series of statements about school life. The rationale for the quality of school life questionnaire suggests that seven subscales (based on groups of statements to which students respond in a similar pattern) are contained within it but that the subscales would not be independent of each other. As part of the study an examination was made of items and subscales to ascertain whether the 40 items clustered into subscales consistent with the measurement model, whether the scales were reliable in the sense of being internally consistent, and the extent of the correlation between scales. The technique used was a form of factor analysis involving an oblique rotation of factors (see Appendix 1).

Generally the items clustered in a pattern consistent with the model. None of the items failed to show a loading beyond the cut-off on the appropriate scale and only two of the 40 items loaded on different scales to those proposed. Item 7 (my school is a place where I really get involved in the work I do) was intended as a measure of achievement but loaded equally strongly with the positive affect items. Item 17 (my school is a place where I am treated with respect) was intended as a measure of status but was found to be equally strongly related to items concerned with teacher-student relations as with other items concerned with status. These two items are not included in the subscale scores.

Separate analyses revealed that the same general structure of the scales held for each year level studied although some items were less satisfactory at particular year levels as indicators of the respective domains. For consistency the same items were used to provide subscale scores at each year level (details are contained in Appendix 1). Typical items from each subscale are shown below:

Positive Affect:	'My school is a place where I really like to go each day'
Negative Affect:	'My school is a place where I feel depressed'
Achievement:	'My school is a place where I am a success as a student'
Opportunity:	'My school is a place where the things I learn are important to me'
Status:	'My school is a place where I feel important'
Identity:	'My school is a place where I learn to get along with other people'
Teachers:	'My school is a place where teachers are fair and just'.

A full list of the items making up each subscale is contained in Figure 3.1.

Positive affect

I like learning
I get enjoyment from being there
I really like to go each day
I feel proud to be a student
I find learning is a lot of fun

Negative affect

I feel depressed
I feel restless
I feel worried
I feel lonely
I get upset

Teachers

teachers help me to do my best
teachers give me the marks I deserve
teachers listen to what I say
teachers are fair and just
teachers take a personal interest in helping me with my schoolwork
teachers treat me fairly in class

Status

people look up to me
I feel important
I know people think a lot of me
I feel proud of myself
people care what I think
I am treated with respect

Identity

I find it easy to get to know other people
other students are very friendly
other students accept me as I am
I get on well with the other students in my class
I learn to get along with other people
mixing with other people helps me to understand myself

Opportunity

the things I am taught are worthwhile learning
the things I learn are important to me
the work I do is a good preparation for my future
the things I learn will help me in my adult life
I am given the chance to do work that really interests me
I have acquired skills that will be of use to me when I leave school

Achievement

I know I can do well enough to be successful
I get really involved in the work I do
I know how to cope with the work
I have learnt to work hard
I always achieve a satisfactory standard in my work
I am a success as a student

Figure 3.1 Items Grouped in the Domains of the Quality of School Life Questionnaire

Subscale scores were calculated by the usual procedures: for each student, each item was coded from 1 (definitely disagree) to 4 (definitely agree) and the subscale scores were calculated by adding the score for all the items in that group. Those subscale scores were used as indicators of the quality of school life in that domain. The study showed the subscales to be reliable measures. In addition it was possible to construct a reliable overall scale of all the positively oriented items. In a few places this provided a parsimonious summary statistic but in general the study used the subscale scores as a more useful and more readily interpretable index of satisfaction with particular domains.

Father's occupation was used as an indicator of socioeconomic status with each occupation being assigned a value on a 16-point scale of occupational prestige (Broom et al., 1975) and then being recoded to an abbreviated six-point scale for analysis purposes. The measure of ethnic background was based on father's country of birth coded finally into seven main categories. This enabled some more detailed comparisons than would be possible with the trichotomous classification (Australian, other English speaking, or non-English speaking). The categories in the present report are Australia, Other English Speaking, Northern Europe, Southern Europe, Eastern Europe, Asian, and Other.

Self-rating of ability was based on a single-item indicator used with some success by Williams, Clancy, Batten and Girling-Butcher, (1979). On this item students simply rated their ability in relation to their peers on a five-point scale from 'a lot above average', through 'about average', to 'a lot below average'. The coding of subject areas, planned courses of further study and other aspects are reported in Appendix 1.

Sampling and Administration

The sample of schools in this study was a stratified random sample. In the present study stratification was based on type of school (high or technical), organization in the middle school years (that is vertical grouping or not), and curriculum structure at Year 12. Since vertical grouping in the middle years was of major interest and since this arrangement was reported by about one-fifth of schools, a disproportionate sampling fraction was used to investigate this feature. A sampling fraction of 0.1 was used for the four strata with no vertical grouping in Year 10 and a fraction of 0.2 was used for the four strata with vertical grouping at that year level. The fractions were chosen in order to give similar precision to estimates for each form of organization and thereby result in an overall sample of about 50 schools. In practice the study was based on 53 schools. Population estimates were based on computations made using weighting factors to compensate for the disproportionate sampling. Details can be found in Appendix 1.

Students in the sample were drawn from each year level in the school. The plan was to sample about 30 students from each of Years 7 to 11 to ensure stability in the school estimates, and to include all Year 12 students. Schools were asked to sample

from their school lists according to a systematic procedure provided by the researchers. Where this was not possible, intact mixed-ability classes were used as a compromise. An attempt was made to include two mixed-ability classes in these cases. For very small schools the questionnaire was administered to all students, and, in a few cases, at the request of the school this was done for middle-size to large schools. In those latter cases the full population was analysed in order to provide feedback to the schools, but for the purposes of this report a sample only was used. In practice the average achieved sample size at each year level was close to that anticipated: it ranged from 26 at Years 9, 10, and 11 to 28 students at Years 7 and 8. A total of 8464 students were included in the sample.

For analyses conducted at the student level it is sometimes appropriate to apply weighting factors at each year level so that each school contributes to the overall result in proportion to its size. The weights used here were based on official July 1984 enrolments. In the case of Year 12 where the intention was to sample all students, it is arguable whether weighting should be used. This issue is discussed later in the relevant section of the report, and also in Appendix 1.

In a sample design where schools are sampled first, and then students are sampled within schools, the effect of clustering reduces the effective sample size (see Ross, 1978). The extent of this reduction depends on the size of the cluster and the intra-class correlation coefficient (a measure of the similarity within each school): this is ultimately reflected in the design-effect factor. Values of design-effect factors for each of the quality of school life scales at each year level have been calculated in Appendix 1. These are used throughout the report to adjust estimates of levels of statistical significance associated with differences between means and other reported statistics. Consequently, the testing for statistical significance is more rigorous than in the case when clustering in a sample is ignored.

The surveys to students and teachers were administered by mail to schools in early October 1984, although in about eight schools personal visits were made to conduct the survey. Of the 53 schools initially selected, four were replaced because they were committed to another ACER study and a further seven were replaced because they declined to participate.

Arrangements were made so that teachers could reply through a bulk mailing procedure or direct to the researchers. Both options ensured confidentiality of response. From teachers, 1646 replies were obtained from the 53 schools: this represented a response rate of approximately 65 per cent (see Appendix 1).

Field Work

Purpose

Educational research has only recently recognized the importance of providing both quantitative and qualitative information about complex situations or institutions such as schools. Light and Pillemer (1982), for example, provided three broad strategies for combining different types of information in reviewing research studies: quantifying descriptive reports, presenting quantitative outcomes narratively, and allying statistical and descriptive evidence while maintaining the integrity of each. In particular, they suggested that reviews which use this last approach will ultimately maximize our knowledge and improve our understanding of the phenomena under study.

An alternative, with the same methodological intention, is to use qualitative descriptions - based primarily on interview material - to complement quantitative information. The justification for this approach was based on the nature of the study involved and the limited time available in each school setting. As such, the collection, analysis and combined use of qualitative, as well as quantitative, information are meant to provide the basis for more powerful explanations than would otherwise be the case. This was the intention of the field work in the present study.

Method and Techniques

Qualitative information was collected primarily through unstructured interviews conducted by a team of three interviewers over a two to three day period in each school during October 1984. The principal in each of the seven schools was asked to nominate interviewees, with the proviso that these participants, either individually or in groups, represented the main interest groups involved in, or affected by, the organizational arrangements under study. Although the nomination procedure probably resulted in the selection of some individuals or groups who did not necessarily satisfy this stipulation, several suggestions were made by the interviewers, both prior to and during the visitation, to endeavour to ensure that the main stakeholders' opinions were sought.

On average, fifteen interviews were conducted in each of the five categories of schools, selected to represent different organizational arrangements of interest. These categories were:

1 A Cluster arrangement (Schools A, B and C)
2 A Technical-High School (School D)
3 A Vertically-Moduled High School (School E)
4 A Technical School with a T-12 program (School F)
5 A High School involved in a major innovation - the School Improvement Plan (School G)

All interviews were tape-recorded with the agreement of the respondents involved. Different members of the interview team reviewed all the tapes related to a particular organizational arrangement and made detailed notes, including significant direct quotations. Initially each interviewer listened to a selection of tapes and formed broad headings within which data could be categorized. Subsequently three main categories were used: Curriculum Structures, Student Welfare Systems, and Decision-Making and Policy Formulation Structures. Concerns and issues, as defined by Guba and Lincoln (1983), in those categories were allowed to emerge from the data. The decision as to whether or not particular concerns (defined as matters of importance to one or more persons), or particular issues (defined as matters of dispute between two or more persons) could fit into any of the three categories was largely determined by the focus of the study; the ways in which curriculum and organizational arrangements in post-primary school impact on teacher and student perceptions of schooling. In all settings school or community participants were encouraged to provide any supplementary written information which would support views or opinions which had been expressed.

In order to ensure the authenticity of the information of the data collected, at least three procedures were adopted. First, in most instances the school principal was usually the first person to be interviewed. After all other interviews had been conducted this person was again interviewed in order to discuss any perceived contradictions or differences of opinion gleaned from other interviews. Second, as each qualitative statement was written by one of the interviewers, it was subjected to the critical comments of at least one of the other interviewers involved. In this way differences of opinion could be discussed and revisions made to the statements prior to the comments which the schools would make. Finally, school staff were offered the opportunity to respond to draft statements prior to the publication of any materials. All of the schools involved in the study accepted this offer and, in one instance, a school invited several of the researchers back during 1985 to outline changes which had subsequently occurred. However, the right to comment on draft statements about the setting did not extend to the right of veto by participants, either individually or as a group. Such a position was clearly made known to staff members prior to any agreement to participate in the study.

The Schools

The selection of schools to be involved in this study was based on the criteria of appropriateness, accessibility, and interest. Each selected school needed to fit within one of the five organizational categories referred to above, needed to agree to participate in the study, had to be accessible in location and interested, for their own planning purposes, in the information collected during the study.

In retrospect, two of the selected schools did not accurately represent the particular category for which they were selected. The technical-high school (School D)

probably better represented a school organized into a mini-school arrangement; similarly, the secondary school involved in a major innovation (School G) could be more accurately described as a second example of a vertically-moduled high school, with Years 8-10 being organized in a way similar to that of School E.

Schools A, B and C were participating in a shared campus arrangement for the Year 12 program. While each of these schools was sited in an industrial area on the outskirts of a major regional centre, they varied considerably in size, ethnic composition, and curriculum orientation. School A, was a long established, medium-sized high school which provided a traditional academic program in Years 7-11, with Year 11 being characterized by an extensive unit system. Like many government high schools it suffers from declining enrolments. School B, established only in the late 1970s, also had a traditional secondary school program with Year 12 being offered for the first time in 1983. Despite the sudden growth of the school - almost doubling the school population between 1980 and 1984 - the introduction of Year 12 placed a considerable strain on available resources; initially 16 HSC subjects were offered to 26 students. School C, a technical school established in the late 1950s, offered a conventional but technically-oriented Year 11 curriculum program organized within the framework of a house system. Of the three schools in the cluster it had the lowest proportion of students of non-English-speaking background and appeared most likely to maintain high student numbers into the future.

School D was a modern technical-high school, architecturally and organizationally designed around four mini-schools. The school, established in the mid-1970s and located in a regional city, had comparatively high student numbers, even though there were variations in numbers within particular mini-schools. Each mini-school, which operated basically from Years 7-10, had curriculum autonomy with a set of basic philosophical guidelines and was self-sufficient in staffing, timetabling, and finance. Although school publicity statements suggested that students followed 'the same course structure in Years 7 and 8' and that 'during Years 9 and 10, students continue to follow a common core', this was not strictly the case. As occurs in most settings, the historical development of the school has had a considerable bearing on the emergence and development of the particular ethos of each of the mini-schools: curriculum organizations in the mini-schools ranged from horizontal year-level arrangements to vertical modular structures. In many respects it was the issue of mini-school autonomy in relation to overall school co-ordination and decision making which was perceived to be one of the most significant issues to be resolved in the future development of the institution. In school D there was some criticism from teachers of those aspects of the teacher questionnaires concerned with structural coupling, in that the questionnaire was more oriented to a traditional form of organization. Five of the 52 respondents from this school indicated that the form of some of the questions was inappropriate to that

type of organization. The response rate, however, was about the same as for the sample as a whole.

School E had a well established vertical organizational structure which formed the basis of its middle school curriculum for year levels 8-10. This co-educational, comprehensive high school, established in the early 1960s, was located on the metropolitan fringe and served several small towns located within a primarily rural area. Classes in Years 7, 11, and 12 were year length and based on a traditional horizontal structure; in contrast, the more recent vertical curriculum organization of the middle school was based on a range of one-term units graded, at least in theory, according to 'basic' or 'advanced' levels of difficulty. Student enrolment projections for the school generally suggest a situation of stable student numbers, provided local conditions, including the proximity of new schools and retention rates, remain much the same.

These conditions differed markedly from those existing in School F. This co-educational technical school was located in a working-class sector of the metropolitan area. In many respects, compared with the other four settings, the type of curriculum organization in this school best reflected a horizontal year-level arrangement. A common curriculum was provided for students in Years 7 and 8; in Year 9, students undertook a 'common core plus elective' arrangement of subjects. In contrast, a different core and elective arrangement operated in the school for Years 10 and 11 students for whom maths and sport were compulsory. Despite the introduction of the Technical Year 12 (T12) in 1982, and its extension in both 1983 and 1984, thereby increasing Year 12 enrolments from 40 students in 1982 to 79 in 1984, the school overall faces the possibility of declining overall school enrolments in future years. Just under three quarters of the school population were males.

School G was a co-educational high school located in the metropolitan area and serving essentially a working-class community. However, since the school was opened in the late 1960s, there have been two trends which have, in varying degrees, impacted upon the school. First, there has been a high influx of migrants into the area, particularly from Greece. By July 1984, over 80 per cent of the school population was either born overseas or had one or more parents born overseas; of these students a few more than half were of Greek origin. Second, although of less significance in its effect on the school, there had been a recent influx of Australian middle-class professionals and executives into the locality. This has tended to impact more on the image of the area than directly on the school itself which, when compared with other settings, continued to face a significant problem of declining enrolments. Student numbers, for example, had by February 1984 declined by 14 per cent from the 1981 figures. It is further projected that the comparable figure from this base will see a 43 per cent decline in student numbers by 1987. Curriculum in the school was divided into three sections - a junior

school (Year 7); a middle school (Years 8-10) which was organized on a five-level, vertically moduled basis; and a senior, more traditional school (Years 11 and 12). These arrangements, together with others of a broader organizational nature, were of interest in terms of attempting an explanation of the interaction between these features and the decision to introduce an innovation like the School Improvement Plan (SIP). The postponement of SIP planning, due to the desire to make use of Participation and Equity Program (PEP) funding in the last term of 1984, subsequently resulted in the research emphasis becoming one in which an attempt was made to understand the interaction between the existing and proposed organizational arrangements and this later Commonwealth initiative.

In Summary

The strategy for the study involved the application of complementary approaches in order to develop an understanding of complexities of school organization in Victorian secondary schools. An initial descriptive survey was designed to provide a general picture of curriculum and organizational features of those schools. A correlational study of 50 schools was intended to provide more detail about school organization, as well as general information about relationships between such organization and the responses of teachers and students. Such an approach focused on general statements and therefore tended to overlook particular aspects of schools which may not have been envisaged initially, or which were not amenable to this type of investigation. For this reason the study also included qualitative field work as a third component of the overall strategy.

SECTION 2

SCHOOL ORGANIZATION

This section is concerned with organizational aspects of Victorian government secondary schools. Chapter 4 is descriptive, outlining the main organizational features and curriculum structures in Victorian secondary schools in 1984. Chapter 5 describes decision making and school co-ordination. Its intention is to describe the arrangements made for making decisions in terms of the levels at which decisions were made, and the extent of participation in the decision making process. It draws on qualitative data to examine the relationships between different structures within some schools.

CHAPTER 4

STRUCTURAL AND CURRICULUM FEATURES OF SECONDARY SCHOOLS IN VICTORIA

Other than in a one-room single-teacher rural school, it is necessary for there to be an organizational structure within which a school's various teaching functions can be performed. Even a single-teacher rural school probably does not function as an undifferentiated group but subdivides into distinct groups of pupils for particular functions. In addition, within the broad curriculum of a school there is some categorization of various elements into subjects, units, or topics. The first of these domains of differentiation is referred to as an organizational structure and the second as a curriculum structure. One might expect the organizational and curriculum structures of schools to reflect their broad educational goals but be constrained by the availability of resources and local circumstance.

Alternative views have been put forward regarding the importance of structures in the development of good schools. Mazarrella (1985), reviewing research concerning the effective high school principal, argued that the development of a school culture which emphasized scholarship was more important than the structures within a school. That conclusion is consistent with the arguments of those concerned with effective primary schools. In the context of the schools typically studied in that field of research, it has been argued that characteristics such as strong leadership, high expectations, and supportive relationships are most important (see Edmonds 1984; Clarke et al., 1984). Generally these writers have argued that organizational norms and belief systems are more important than formal definitions of structure. On the other hand, Purkey and Degen (1985:2), in outlining the characteristics of 'good schools' (which they distinguish from effective schools), drew on the literature of reform in the workplace to argue that 'initially it is easier to change school structures that can influence the behaviour of entire staff than it is to get individual teachers ... to think about education in new ways, alter deeply held beliefs, or adopt radically different patterns of behaviour'.

Major policy reviews have usually discussed schools and school systems in terms of curriculum and organizational arrangements because those features are considered amenable to change and because in many ways they represent the public face of the school system. The recent Ministerial Review of Post Compulsory Schooling responded to and stimulated interest in Years 11 and 12. In both the discussion paper (Victoria, 1984) and the final report (Victoria, 1985), changes in the organizational and curriculum features of Victorian secondary schools were canvassed.

The present chapter does not investigate these alternative views of the role of organizational and curriculum structures in schools. It is restricted to a description of

the organization of secondary schools in Victoria in terms of the way students are grouped and the way the curriculum is structured. Given the concerns of the present time, most attention is focused on Years 11 and 12, but information is also presented about Years 7 to 10. In considering structural arrangements our scope is restricted to two aspects of the grouping of students: the operation of vertically-grouped arrangements and the formation of subschools. The choice of the first of these is governed by the consideration that this form of organization has emerged in a significant number of schools and that it is one of the possibilities for Years 11 and 12 suggested by the Ministerial Review. The choice of the second emerges because it represents a way in which schools have attempted to create smaller units with which teachers and students can identify. The examination of curriculum structure is focused on the form of organization of subjects and units rather than the details of those elements which make up a curriculum.

Information Base

Three sources of information were used as the basis for this chapter. The main source is the survey of secondary schools conducted in July 1984 and described in Appendix 1. In summary, that survey was sent to all secondary schools in Victoria with replies being received from 97 per cent. The response rate was high from each of the subcategories of secondary school. In addition, information from a national survey conducted in 1983 was used to provide a point of comparison between Victorian secondary schools and schools in other states in some aspects of curriculum arrangements in Years 11 and 12. The third source of information was the qualitative field work conducted at several schools at the end of 1984 and beginning of 1985.

Curriculum Arrangements

Types of Program in Years 7 to 12

As part of the 1984 survey, all secondary schools were asked to indicate the type of program offered at each of the year levels within the school. The form of the question asked the principal to indicate which of five statements best described the school's teaching program at each year level. These statements, together with the percentages of schools responding to them, have been recorded as part of the detail in Table 4.1.

Since it was possible that a respondent's perception of what was intended by each of these statements might not always have corresponded to that intended by those who designed the questionnaire, comment on the data has been restricted to broad trends and the most common patterns. Across all post-primary schools the most common curriculum patterns appeared to be as follows:

Table 4.1 Types of Program in Years 7 to 12 in Victorian Secondary Schools (1984 Survey) Percentages Recorded in Columns

Program type	Year level					
	7	8	9	10	11	12
One type of course based on a series of separate subjects	77	69	21	3	7	12
A program of integrated studies which is taken by all students	5	3	1	1	1	1
Various types of largely separate courses (e.g. academic, vocational, commercial)	1	1	1	3	12	15
A program based on a compulsory core and a series of electives	15	23	69	82	30	14
A program based almost entirely on a series of electives or units	1	4	8	11	50	56

1 At Years 7 and 8 the program was most commonly indicated as one type of course based on a series of separate subjects.

2 At Years 9 and 10 the most commonly chosen descriptor was 'a program based on a compulsory core and a series of electives'.

3 At Years 11 and 12 the program was most commonly described as 'based almost entirely on a series of electives or units' although this was more dominant at Year 12 than Year 11.

These patterns were similar to those reported for Victoria as part of a survey of a sample of schools conducted in 1979 (Ainley, 1982:155).

In addition to considering the overall pattern of responses in the 1984 survey, it was possible to examine differences in curriculum patterns in different types of school. Differences which were observed included the following:

1 At Year 9 the modal response for each type of school (50 per cent of Technical Schools and 75 per cent of High Schools) was 'a compulsory core and a series of electives'. However, a greater percentage of Technical (47 per cent) than High Schools (12 per cent) indicated that the best description of the program was 'one type of course based on a series of separate subjects'. This difference appeared to exist to a smaller extent at Years 7 and 8. At those levels both High and Technical Schools predominantly indicated the 'one type of course' response but there was a larger percentage of secondary schools choosing the 'core and electives' response.

2 At Years 11 and 12 a smaller percentage of Technical Schools than High Schools indicated the program was 'based almost entirely on a series of electives'. For Technical Schools, at Year 11 the modal response was 'a compulsory core and a series of electives' which possibly reflected a difference in emphasis on the 'core'

from that in High Schools where at least English would have been included. At Year 12, the responses from Technical Schools were distributed over all five categories though more emphasis was given to the last three categories listed.

3 Community Schools reported a variety of curriculum arrangements at each of the year levels which suggested that there was not a uniform approach common to all these schools. At each year level from 7 to 12, the most frequently chosen descriptor was a program based on a 'compulsory core and a series of electives'. The only descriptor not chosen by any of these schools for any year level was 'various types of largely separate courses'.

4 Even though at Year 11 the most common response given by the Technical High Schools was, as for High Schools, 'a program based almost entirely on a series of electives', about one-third of these schools indicated that the most appropriate description was 'various types of largely separate courses'. This could possibly have reflected the fact that those schools provided courses associated with both their secondary and technical roles.

5 The schools designated as 'Post Primary' encompassed Year 7 (in all five cases) and Year 8 (in one case) only. All these schools described the program as 'one type of course based on a series of separate subjects'.

The Range of Subjects in Years 7 to 12

As part of the survey, school principals were asked to indicate for each year level the following information:

1 The total number of separate subjects taught at the year level.

2 The average number of subjects taken by each student at the year level.

3 The number of compulsory subjects which all students at the year level must take.

The aspect of the question which appeared to cause greatest confusion was the number of compulsory subjects. In a few cases schools gave answers to that question which were not consistent with the answers to other parts of the questionnaire. In those cases the responses were treated as missing data. In Table 4.2 information about the range of subjects available in post-primary schools has been presented. The data have been recorded for all secondary schools (including Community Schools, 'Post-Primary' schools, and Technical High Schools) and not only High Schools and Technical Schools.

In addition to information about total numbers of subjects, average numbers of subjects, and numbers of compulsory subjects, two simple indices were computed. The first was a 'choice' index, calculated on a system-wide basis to provide an indication of the range of subjects available to students in relation to the number each student was required to take. That index was calculated using average data for the aggregations of schools rather than being calculated for each school and then averaged. It measures the

choice provided by schools and does not take into account other restrictions on student choice such as compulsory subjects or compulsory combinations of subjects. It was defined as follows:

$$R = T/A$$

where R = choice ratio,

T = the total number of subjects at the year level,

A = the average number of subjects taken by each student at the year level.

The second was an option ratio. This indicated the extent to which the students had some option in the subjects which made up their course and was defined as follows:

$$E = A/C$$

where E = the option ratio,

A = the average number of subjects taken by each student at the year level, and

C = the number of compulsory subjects which all students must take.

If all subjects were compulsory the value of this index would be 1, and as the element of discretion or choice increased the value would increase.

In terms of the total numbers of subjects taught at a year level, the data in Table 4.2 showed that the highest means occurred in Years 10 and 11. For Technical Schools the maximum was 27 subjects in Year 11 and for High Schools the maximum was 23 subjects in Year 10. However, in the case of High Schools the Year 10 figure may have been inflated by the existence in a few schools of term-based units and the like, and probably should not be regarded as being very different from the Year 11 figure of 21 subjects.

Table 4.2 also suggested that as students progressed through the school they studied fewer subjects per year. In Year 7 around 11 or 12 subjects were studied whereas in Year 12 the number of subjects studied was five for High Schools and seven for Technical Schools. With the exception of Year 10, students in Technical Schools took a larger number of subjects than their counterparts in High Schools.

It was evident that, as the year level increased, there was less compulsion in terms of subjects studied . This was indicated by the numbers of compulsory subjects, the values of the choice index, and the option ratio. The numbers of compulsory subjects declined across the year levels in both High and Technical Schools although, with the exception of Year 10, there were fewer compulsory subjects in High Schools than Technical Schools. The choice index indicated the range of subjects available from which a student's course could be constructed. This index had a value close to one in Years 7 and 8, increased in Years 9, 10, and 11, and for high schools showed a slight decline in Year 12 compared with Year 11 with a more noticeable decline in Year 12 for

Table 4.2 Range of Subjects in Secondary Schools in Years 7 to 12 (1984 Survey)

	All secondary schools						High schools						Technical schools					
	Year						Year						Year					
	7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
Average total number of subjects	13	15	19	24	23	16	13	15	20	23	21	16	12	13	15	25	27	13
Average number of subjects taken by student	11	11	10	9	7	5	11	11	10	10	6	5	12	12	12	9	8	7
Average number of compulsory subjects	10	10	7	5	3	1	10	10	7	6	2	1	11	12	9	4	3	3
Choice index[a]	1.2	1.4	1.9	2.7	3.3	3.2	1.2	1.4	2.0	2.3	3.5	3.2	1.0	1.1	1.3	2.8	3.4	1.9
Option ratio[a]	1.1	1.1	1.4	1.8	2.3	5.0	1.1	1.1	1.4	1.7	3.0	5.0	1.1	1.0	1.3	2.3	2.7	2.3

[a] See text for definition.

Technical Schools. The option ratio indicated the proportion of a student's course (on average) which was not made up of compulsory subjects. This ratio was close to one in Years 7 and 8 indicating that there were few options allowed in courses. For High Schools the value of the ratio increased a little in Years 9 and 10, and then increased further still in Years 11 and 12.

Curriculum Arrangements in Year 12

High schools excluding community schools. Of the High Schools which replied to the questionnaire, 271 schools indicated that a Year 12 program was provided with a further four schools not answering the question in a way which could be coded. Of the schools which did not respond at all, six were schools which would have been expected to provide a Year 12 program. In brief around 93 per cent of High Schools considered provided a program at Year 12.

Information about the types of program provided at Year 12 in high schools has been recorded in Table 4.3. Three major categories of Year 12 program have been used to classify the data. These categories were 'only VISE Group 1 subjects', 'mixture of VISE Group 1 and other courses or subjects', and 'no VISE Group 1 subjects'. In addition, subcategories shown in Table 4.3 were used to provide greater detail about the combinations of programs in Year 12. According to these data some 48 per cent of High Schools offered only VISE Group 1 subjects, 48 per cent offered some combination of VISE Group 1 Subjects with VISE Group 2 Subjects or Approved Study Structures, and 3 per cent offered only Group 2 studies. Of the schools offering a combination of VISE Group 1 and VISE Group 2 studies (48 per cent), the most common pattern was a mixture of Group 1 and Group 2 Subjects, with a smaller percentage offering a combination which involved an Approved Study Structure.

Community schools. Five of the six designated community schools from which data were available were normally classified with high schools and provided a Year 12 course of study. All five such schools provided Year 12 through a Group 2 Approved Study Structure alone.

High schools including community schools. Inclusion of Community Schools as part of the High Schools classification made little difference to the distribution of schools according to program type. Overall some 47 per cent of High Schools (including the community schools) offered Group 1 subjects only, 47 per cent offered a combination of Group 1 subjects with various forms of Group 2 studies, and around 5 per cent of schools provided Group 2 studies only.

By comparison with figures published in the Discussion Paper issued by the Ministerial Review of Post-compulsory Schooling (Victoria, 1984:52), which indicated that some 60 per cent of High Schools had offered Group 1 studies only, 38 per cent

Table 4.3 Year 12 Program in High Schools in 1984

Main category	Subcategories	Percentage high schools[a] (n = 271)	Percentage community schools[b] (n = 5)	Percentage combined[c] (n = 276)
Only VISE Group 1		48[a]	-	47[a]
VISE Group 1 plus other		48[b]	-	47[b]
	. VISE Group 1 plus Group 2 subjects	(36)		(35)
	. VISE Group 1 plus Group 2 study structures	(7)		(7)
	. VISE Group 1 plus Group 2 subjects plus Group 2 study structures	(2)		(2)
	. VISE Group 1 plus a school course	(-)[c]		(-)[c]
	. VISE Group 1 plus a school course plus Group 2 subjects	(3)		(3)
	. VISE Group 1 plus a school course plus Group 2 study structures	(-)[c]		(-)[c]
No VISE Group 1 subjects		3	100	5
	. VISE Group 2 subjects plus school subjects	(-)[d]		(-)[d]
	. VISE Group 2 study structures	(3)[e]	(100)	(5)[e]

a Includes 1 school with only correspondence courses for VISE 1 subjects.
b Includes 1 school with only correspondence courses for VISE 1 subjects.
c Only one school in the category.
d The one school in this category offered one VISE Group 2 subject, three TAFE subjects and two school developed subjects.
e One of the non-responding high schools was in this category.

offered a combination of Group 1 and Group 2 studies, and 2 or 3 per cent offered Group 2 studies only, the data from the present survey seemed to indicate a shift towards more Group 2 studies being offered in 1984 than in 1983. The main shift appeared to be from schools offering Group 1 subjects alone to offering Group 2 studies as well as Group 1 subjects. Although this trend was apparent it should be noted that the average number of VISE group subjects was still between two and three. The shift in the percentage of schools offering Group 2 studies alone could have resulted from only a few schools since the base number in 1983 was small.

The offering of Group 1 studies by correspondence was important in a large percentage of schools. In three-quarters of the Secondary Schools (excluding Community Schools) one or more VISE Group 1 subjects were available through correspondence. For almost all (just under nine-tenths) of these schools, three or fewer such subjects were offered with the mean number of correspondence subjects being 2.2 for those schools offering this option. In a few schools four or more subjects were available by correspondence study.

High schools: types of subjects. In Table 4.4 data have been recorded which indicate the numbers of subjects of different types available at Year 12 in High Schools (excluding Community Schools). The data have been classified according to the curriculum structure at that year level. Information concerning the mean number of subjects in alternative course structures may be misleading in that the dispersion in this category appeared to be large (reflecting some schools with only three strands of an integrated study structure and other schools with a wide choice of subjects), and in that the 'subjects' were not necessarily of similar time allocation. The recorded data concerning subjects 'other' than those specified should be treated with caution at this stage because there has not been sufficient time to check what was intended by the responses to this question. In practice only nine schools indicated that any 'other' subjects were provided.

From Table 4.4 it appeared that, for schools which offered VISE Group 1 subjects alone or together with other forms of study, an average of 14 to 15 such subjects were offered, with an additional one to two subjects being available through correspondence study. There did not appear to be any substantial difference in the average number of Group 1 subjects available between schools which offered only those subjects and schools which provided other additional forms of study. Schools which offered Group 2 subjects in addition to Group 1 subjects appeared to provide an average of two to three Group 2 subjects. Of all the schools which provided Group 2 subjects (not including those forming part of an Approved Study Structure), around one-third (36 per cent) provided three or more of those subjects. This figure represented about 17 per cent of all schools. Where courses constituting an Approved Study Structure or a School Developed Course were

Table 4.4 Average Numbers of Subjects Available in High Schools with Different Curriculum Structures at Year 12 (1984 Survey Data Excludes Community Schools)

Curriculum structure	N	Group 1 subjects	Corresp. subjects	Group 2 subjects	Subjects in alt. course[a,b]	Other subjects[c]
VISE Group 1 subjects only	131	14.2	1.6	0	0	0.2[c]
VISE Group 1 and Group 2 subjects	98	14.8	1.8	2.5	0	0.1[c]
VISE Group 1 and Group 2 subjects plus another course[a]	14	14.7	1.9	2.6	8.1[b]	0.4[c]
VISE Group 1 plus another course[a]	19	14.3	1.9	0	7.6[b]	0.1[c]
NO VISE Group 1: Other course only[a]	8	0	0	0	11.0[b]	0
VISE Group 2 plus school subjects only	1	0	0	1	0	5

a Mainly VISE Group 2 Approved Study Structures but also includes school developed courses.

b Data for numbers of subjects in alternative courses may be misleading in that some courses are based on three areas of study which all students undertake while others involve a choice of subjects.

c These data are approximate only and indicate that some schools may provide additional studies to the categories considered above.

offered, those programs seemed to involve the equivalent of around eight additional subjects, but the previous caution regarding what could be considered a 'subject' in this context needs to be noted. In summary, these data suggested that, where Group 2 subjects and courses were offered in combination with Group 1 subjects, those additional offerings did not result in a reduced range of Group 1 subjects being available. However, to explore that issue more fully an analysis which allowed for differences in school size would need to be undertaken.

Technical schools. Of the 100 responding Technical Schools some 59 per cent indicated that a Year 12 program was provided. This figure reflected a considerable expansion in recent years. In 1983 it appeared that only about one-third of Technical Schools provided for studies at Year 12. In analysing the information concerning the types of program at Year 12, the report has been concerned with full-time courses of study, although it should be noted that just under 30 per cent of the schools surveyed (or about half of those with some Year 12) indicated that part-time study in TAFE programs was provided.

Information about full-time programs of study at Year 12 was based on 57 schools which provided codeable responses to the question about types of program. Of those schools 70 per cent (i.e. 40 schools) offered the Technical Year 12 Program (T12), 42 per cent (i.e. 24 schools) provided study in the Tertiary Orientation Program (TOP), 18 per cent (i.e. 10 schools) provided other full-time TAFE courses, 12 per cent (i.e. 7 schools) provided one or more VISE Group 1 Subjects, 10 per cent (i.e. 6 schools) provided one or more VISE Group 2 Subjects, and 5 per cent (i.e. 3 schools) provided an Approved Study Structure. In addition 16 per cent of technical schools (i.e. 9 schools) provided some other courses described as being at Year 12 level. Of course, these percentages add to more than 100 because some of the schools offered more than one type of program. Table 4.5 contains details of the combinations of structures which were reported as available in Technical Schools with Year 12 in 1984. The most common form of provision was through the Technical Year 12 Certificate on its own or in combination with other equivalent courses of study. In just over one-third of the schools with some Year 12, there was more than one course available at this level.

Technical High schools. Schools designated as Technical High Schools have been considered as a subcategory of Technical Schools. In the study, all of the five identified schools replied to the survey (although one of the schools provided separate information regarding each of its campuses). As was noted earlier in this chapter, schools designated as High Technical Schools were included within the High School classification. It appeared that the Year 12 programs in most of these schools were similar to those of High Schools with some evidence of other studies being offered. All these schools offered VISE Group 1 subjects (an average of 14.6 with a further 1.6 by correspondence),

Table 4.5 Types of Program at Year 12 in Technical Schools: 1984 Survey[a]

Types of program	Percentage of schools[b]
T12 Course	40 (23)
T12 plus TOP	9 (5)
T12 plus other designated studies[c]	5 (3)
TOP	12 (7)
TOP plus other designated studies[c]	5 (3)
T12 plus TOP plus other designated studies[c]	16 (9)
Other designated studies[c]	9 (5)
Other provisions not mentioned above	4 (2)

[a] Based on 57 schools with codeable responses to the question about the type of Year 12 programs.
[b] The actual numbers of schools have been shown in brackets.
[c] Refers to full-time TAFE (other than TOP), VISE Group 1 or Group 2 Subjects, and VISE Group 2 Study Structures.

and three of the five provided Group 2 subjects or an Approved Study Structure. Other studies reported by these schools included the Technical Year 12 Program (in two schools) and school-developed technically-oriented studies (in one school).

General Curriculum Patterns in Years 11 and 12

Part of a 1983 survey of secondary schools asked about the subjects offered at Years 11 and 12, and the number of students enrolled in each subject in Victoria, Queensland, South Australia, and Western Australia (Ainley, Batten and Miller, 1984b:75-86).

The Year 12 curriculum. For Victorian high schools, an average of 16 subjects was offered at Year 12. It was universal, or almost universal, for these schools to offer at least one subject from the categories designated as English, mathematics, sciences, the social sciences, and business and commerce. Based on the mean number of subjects per category it appeared that, typically, high schools offered one English subject (although in some cases alternative forms of English were mentioned), three mathematics subjects, three sciences, about five social sciences, and between one and two business or commerce subjects. Average enrolments per subject in these categories were 42 in English, 13 in mathematics, 15 in the sciences, 14 in the social sciences, and 13 in business and commerce. Smaller average subject enrolments were found in literature and language studies (9), Arts (7), and technical studies (6).

Literature and language subjects and Arts subjects were available in about 80 per cent of the schools, while technical subjects and physical education or its equivalent were available in fewer than one-third of high schools. Subjects involving the category designated as work experience, community involvement, or career education were not generally available at Year 12.

According to the 1983 survey slightly fewer than half of the technical schools provided Year 12 studies. Among those schools, there was a higher average total number of subjects (19 per school) than in high schools and a difference in the types of subjects offered. Technical schools offered many more subjects in Technical Studies, more subjects in Arts and Business and Commerce, and fewer subjects in the Social Sciences, Sciences, and Language and Literature.

There were also some variations between Victoria and other systems. There were differences in the numbers of subjects available at Year 12; 16 were available in Victorian high schools compared with 20 across the other systems studied. However, interpretations of this need to be qualified by differences between systems in the number of subjects required to be chosen by each student. In terms of subject categories there appeared to be some differences in emphasis. Slightly more subjects in the category of science appeared to be taught in other systems than in Victorian schools (either high or technical schools). Conversely, Victorian high schools appeared to offer more subjects in the social sciences (though Victorian Technical Schools had fewer subjects in this category) than schools from other systems. Technical subjects were noticeably absent from the Year 12 curriculum of Victorian high schools compared with other systems: they were offered in less than one-third of those schools.

The Year 11 curriculum. The 1983 survey also provided information about Year 11 curriculum patterns. More subjects were offered than at Year 12. On average, 21 Year 11 subjects per school were offered in Victorian high schools, compared with 26 for Victorian technical schools. For Victorian high schools the variations in the number of subjects available at Years 11 and 12 was partly accounted for by differences in the numbers of subjects studied by each student. At Year 12, students on average chose five subjects from the 16 available (a ratio of 3.2) whereas, at Year 11, students on average chose six subjects from the 21 available (a ratio of 3.5).

Among the high schools which responded, it was universal to offer at least one subject from the categories of English, mathematics, science, social science, and business and commerce. The mean number of subjects offered respectively in each of these categories was 1.3, 3.4, 3.2, 5.1 and 2.5 and the corresponding average enrolments per subject were 94, 32, 26, 26, and 23. It was very common for schools to offer at least one subject at Year 11 from the arts (96 per cent) but typically an average of 2.2 subjects (with an average enrolment of 16 students) was offered in this area.

Subjects from the categories of languages and literature, physical education, and technical studies were offered in a majority of high schools (69, 77, and 62 per cent respectively) but only an average of one such subject in each area was available. The average subject enrolment in the language area was low at 11 students. Only a tiny minority of high schools offered any studies in the work experience or community service category at Year 11.

Also at Year 11, Victorian high schools differed from technical schools (or the secondary schools of other states) in some of the range of subjects offered. As would be expected Victorian technical schools offered a considerably wider range of technical subjects at this level than did high schools. The technical schools also provided more subjects in the sciences and the arts. On the other hand technical schools offered rather fewer studies from the social sciences, and fewer subjects from the language and literature area, than did high schools.

In general. The information about school programs at Year 11 and Year 12 showed that a wider number of subjects were offered at Year 11 than Year 12 even though the range of choice for students was not greatly different. At both year levels, at least one subject from the categories English, mathematics, science, and social science was universally, or nearly universally, available. At Year 12, compared with Year 11, there appeared to be a tendency in high schools to provide fewer subjects from the category designated as technical studies, and marginally fewer on average, from the business and commerce, and arts categories.

Providing for Year 12: Two Cases

In practice there exists a range of ways in which schools have responded to demands for greater diversity in the program available to Year 12 students and potential Year 12 students. Among the schools visited as part of the present study two other responses at the Year 12 level were noted. One involved the sharing of resources across three schools to provide a wider range of subjects to the students from those three schools and the other involved the introduction of a Technical Year 12 course of study.

A Shared Campus Response

One response to current Education department policy of encouraging schools within limited resources to provide broader educational programs for youth was illustrated in the development of a shared campus project at the Year 12 level by a group of three neighbouring schools. Such an arrangement evolved in a climate of high youth unemployment and declining school enrolments, and in particular, addressed a mutual concern about falling Year 12 numbers and the ability of each school to offer a viable Year 12 program to those students wishing to continue at school. The rationale for the shared campus arrangement, therefore, was to offer greater curriculum opportunities to students at Year 12. It was envisaged that this project would enable students to:

(i) exercise a wider range of component subjects in their courses;
(ii) gain access to subjects not available at their base school;
(iii) choose courses which were more in keeping with personal abilities and aspirations; and
(iv) maintain interaction with other students in a broader campus experience.

In 1983 two of the schools offered Year 12 courses. At School A, 17 VISE Group 1 subjects were provided for 38 students, while in School B, 27 students were

enrolled in 16 Group 1 subjects, producing very small classes for some subjects and competing demands upon teaching resources in other areas of the schools. School C (a technical school) did not offer a Year 12 program in 1983. There were 11 subjects duplicated between School A and School B, three of which had enrolments of six or fewer students. Nine other subject areas enrolled fewer than six students.

Even though the change in organization which took place in 1984 was primarily concerned with curriculum range, the three schools had also to consider the wider impact of the changes on behavioural aspects of the curriculum. This distinction between the academic and the behavioural curriculum has been made by Musgrave (1973).

The academic curriculum. A major issue in the formation of the shared campus Year 12 program was the rationalisation of subject offerings and, associated with this, the allocation of staff and subjects across the three sites. Several criteria were used as the basis for the selection of subjects into the Year 12 program. These included such aspects as the demand for a given subject, the availability of staff to teach particular subjects and the physical resources needed.

With regard to student demand, in the case of Group 1 subjects an initial enrolment of ten students per subject was set as the minimum required before the class was allowed to commence. A second class was not started until more than 25 students applied. Given that Group 2 subjects were being newly introduced into the curriculum, a lower level of enrolment (4-6 students) was accepted in order to offer a class in that subject. It was anticipated by staff that, as student awareness and acceptance of Group 2 subjects increased and Group 2 became an established component of the Year 12 curriculum, enrolments in these subjects would rise and be less resource intensive.

In deciding which subjects would be offered at the respective campuses, staff availability and expertise were major determinants. Also, during joint consultations among the faculties of each site as part of this process, a conscious effort was made in the allocation of Group 1 subjects to avoid one campus becoming known as the 'science school' or the 'commerce school' due to subject specialisation. Such a trend, if realised, was considered likely to have ramifications throughout the schools in terms of parental and student preferences at lower year levels. Consequently, Schools A and B provided a general subject offering comprised mainly of Group 1 subjects supplemented by several Group 2 options at each site. School C, the technical school, contributed valuable expertise and resources not available at the high school sites and provided six Group 2 subjects. Overall, 21 VISE Group 1 subjects and 10 VISE Group 2 subjects in the H.S.C. program were offered. This rationalisation of subject offerings meant more specifically that School A offered thirteen VISE Group 1 subjects and three VISE Group 2 subjects; School B offered ten VISE Group 1 subjects (four of which were also taught in School A) and one VISE Group 2 subject; and School C, for the first time, offered six VISE Group 2 subjects. Effectively this meant that the only duplication of subject offerings occurred in four Group 1 subjects between Schools A and B. Perhaps even more significantly the reduced duplication of subjects and rationalisation of class size meant that 10 staff were released from existing teaching allocations. In all 35 staff were involved in the teaching of the 1984 program.

Another consideration in the distribution of resources within the program was the nature of student preferences at each site. Where only one class in a subject was to be offered and staff existed at multiple sites, more frequently the smaller number of students were transported to the site with the larger numbers.

Movement between sites for one or more subjects occurred in 15 of the 30 subjects offered and involved approximately one half of the total Year 12 enrolment. In 1984, the larger proportion of students undertook Year 12 at their school of origin, not being required to move campuses for any part of their course, and all students took at least one subject at their school of origin.

Staff at one campus offered the impression that some students in 1984 were pursuing a narrow range of Year 12 courses, in terms of the available curriculum options, due in part to a reluctance to engage in subjects across multiple sites and a less than full appreciation of the Group 2 options which may have been more suitable. Closely tied to this concern was the need for staff to comprehensively counsel prospective Year 12 participants about the possibilities associated with various course selections and encourage students to select Group 2 subjects where this was considered appropriate. As part of this process, a shared campus brochure outlining the various course options in some detail, was prepared for 1985. A return visit to the shared campus in 1985 revealed that there were now few students exclusively undertaking Group 1 subjects. In addition, administrative adjustments, including student counselling in Year 10 (instead of Year 11), altered arrangements to the blocking of subjects in the timetable and more realistic entrance requirements to Year 12 subjects, may well have had a beneficial effect upon the way students planned their courses. Also in 1985 a wider range of Group 2 subjects was made available to students.

One of the potentially complex areas arising from the joint provision of curriculum relates to the comparability of course content and assessment policies at the respective sites. There had been differences in the syllabuses taught at Year 11 and promotion policies with regard to prerequisite subjects, and it became necessary during 1984 to arrange intra-faculty meetings across sites. These meetings enabled the exchange of more detailed knowledge about particular students' backgrounds with respect to current participation in Year 12, and an investigation of the syllabuses taught at Year 11 in the different schools in order to produce more consistency across the curricula. Other curriculum policies which required amendment as a result of the joint operation concerned the presentation of reports (a common format was developed which incorporated the provision of descriptive assessment in the case of Group 2 subjects), and the examination schedule (which differed between sites).

In general, the experience of the shared campus project in 1984 highlighted the importance of continued dialogue between staff members of each site. This dialogue was necessary in order to foster closer commitment to teaching in multiple sites and to the program as a whole as well as to reduce possible misunderstandings, given the broad operational base of the cluster. An equally important issue, which impinged upon the success of such an arrangement, was the need for dissemination of information about the program (its academic content as well as its operation) to other members of the school community. It was particularly important that all staff of each site were made aware of developments and understood the Year 12 scheme and its place in the overall school programs, so that they could contribute to preparing younger students for Year 12.

In organizing the timetable cycle for the Year 12 program, a format was devised which aimed to reduce the disruption associated with frequent movement between campuses and to employ the available teaching resources most effectively. Consequently, the operational cycle was organized into two-hour classes which divided the school day into two sessions on three days of the week and three sessions on the remaining two days. In addition, all students were required to attend a one-hour briefing session each Monday morning at their base school. This hour represented the one time in the week when students from each base school were together to receive information from their co-ordinator and discuss other issues as a group.

While the timetable can be considered both a curriculum mechanism with administrative implications or vice versa, the experience of the cluster highlights the relationship between the two areas. One administrative consequence of differences in organization of the base schools was a series of interruptions to the timetable caused by separate sports days, curriculum days, parent nights, camps etc. which resulted in various students being absent on different occasions. This became of concern to staff as these missed days could involve half a weekly subject allocation and associated contact time in the case of students from other

base schools. Given the comparatively short time interval between initiation and implementation of the shared Year 12 program in 1984, certain fixed curricula activities were planned well in advance and thus could not be changed. Such details were incorporated into a more coherent program in 1985.

In 1985 there were a number of changes to timetable organization which enabled the shared campus to operate more smoothly. School B changed its school timetable so that, like Schools A and C, it was based on six 50-minute periods each day. This enabled the Year 12 timetable to be integrated with the rest of the school. Each Year 12 subject was allocated six periods per week as three double sessions (with HSC teachers being able to use five for their subject). This enabled three contact times during each week between teachers and their class (in 1984 there had been two). A different system of blocking subjects at Year 12 (on the basis of observed patterns of choice) had also resulted in the better operation of the program.

The behavioural curriculum. A number of issues were raised by Year 12 students across the three campuses which were related to what has been called the behavioural curriculum (see Musgrave, 1973).

One such issue concerned the traditional roles assumed by senior students in the overall school program, such as setting examples to younger students, interacting with younger levels through sport and other cross-age activities, occupying leadership positions and being involved in student decision making. Under the shared campus project in 1984, due to different timetable formats and movement between sites, the opportunities to be involved in such activities were reduced. A number of students did participate in sporting events early in the year but were faced with a conflict between participation and catching up on missed work. In the case of School C, no extension of the comprehensive house system which operated in Years 7-11 had occurred to incorporate the Year 12 students. As a result, these students felt less integrated with the general school program in contrast with their active involvement in the past.

Student reaction to the process of integrating with students at the other campuses was mixed. While some students expressed the view that the cluster provided the opportunity to meet others and make new friends, other students found the new situation more difficult. Some teachers reported the occurrence of 'divided classrooms' for the first months of 1984 with members of the same base school sitting and interacting with each other as a separate group. As the year progressed the classes became more integrated. Some students also commented upon the initial strangeness of being senior students in a new school. In an academically demanding year, some students found it difficult to establish relationships with new teachers; for example they needed to determine the expectations of different teachers in contrast with being able to consolidate longer standing relationships with the teachers at their base schools.

Several students suggested that, rather than the single orientation day which was their experience at the end of 1983, contact between the schools should be encouraged in Years 10 and 11, at which levels social activities at the respective campuses could provide opportunities to become more familar with the different settings.

In 1985, the shared campus committee had organized a two-day orientation program for Year 11 students. This involved mixed groups of students from all three sites attending each campus for a number of information sessions as well as social activities. This more extensive program was planned so as to 'break the ice' and provide some contact between prospective student and staff members prior to the commencement of Year 12. As part of the orientation, efforts were made to inform students and parents more fully about the cluster and its operation. It was reported that the 1985 students had responded positively to the orientation program and that in 1985 the Year 12 students were better integrated across the schools. In the second year of operation there was greater awareness of the shared campus concept.

In developing the shared campus proposal, it was hoped to foster a sense of shared identity among the students by including, as part of the uniform, a campus windcheater. However, students rejected the idea and suggested windcheaters bearing the logo of their school of origin. Given the short period of time in which students had had to adapt to the notion of a shared campus and the fact that many of this particular group felt they were acting as 'guinea pigs', it was not surprising that the desired identification as members of a wider campus was not engendered in the first months of the scheme's operation. Hopefully, the intended increase in consultation between the staff at each school about the Year 12 program and a greater emphasis upon the appropriate counselling of students would assist in easing the transition of all students from year 11 into the shared Year 12 campus.

Summary. The 1984 experience served to highlight some of the issues involved and the administrative processes entailed in providing Year 12 at multiple sites as well as to provide perceptions of staff and students as members of a cluster arrangement. With regard to the four original aims associated with the shared campus, during 1984 the broadening of student choice and access to subjects at other sites were achieved. The selection of more individualized courses and the identification by students and staff as members of a wider school community were two goals needing further attention. The second year of operation saw substantial progress in these two areas.

It was apparent that such a cluster arrangement through rationalization and sharing of resources could bring benefits to schools, in close geographical proximity, faced with difficulties in providing viable Year 12 courses within the context of broad curriculum options.

Introducing a Technical Year 12 Study Structure

In discussions, first initiated in 1979, it was agreed that the rationale for the introduction of Year 12 courses in Technical schools in Victoria should be based on a desire to emphasise practically-oriented studies which would motivate students to continue with their general education.

Principles. When technical schools submitted courses for approval from 1981 onwards they had to comply with design principles outlined in the Technical Year 12 Study Structure (T12). These principles included:

(i) that it should be a whole course of study;
(ii) the duration of the course should be approximately 36 weeks with a minimum of 20 hours per week of student instruction;
(iii) a minimum of 15 units, comprising base, base-related units and optional units, should constitute the course;
(iv) the contents of all units should be determined through a process of negotiation with students in order to ensure their relevance to students; and
(v) students would be awarded an Education Department Year 12 certificate on the successful completion of 12 units of work.

The implementation of a T12 program in a school setting. School F was one of the first technical schools to introduce a T12 program in this State. Initially in 1982, this school introduced a course in the area of electrical/electronic studies. This was subsequently followed by two additional courses - a practical business studies course in 1983 and a creative arts and media course in 1984.

Arguably, the organization of the Year 12 program reflected something of a progression of curriculum arrangements from other year levels of the school. In Years 7 and 8, for example, a common curriculum of eleven year-long subjects were offered to students. In Year 9, there was a common core of 7 subjects with 3 elective subjects. Six integrated core areas, consisting of applied science, creative arts and media, environmental studies, construction studies, computing and

technology, and business studies, formed the basis of the school's curriculum for Years 10 and 11. Different subject areas constituted the core. For example, the computing and technology core consisted of five subjects - humanities, science, computer experience, graphics and mechanical appreciation - which constituted 60 per cent of the time allocation per week. The remaining time was allocated to elective studies, compulsory maths and sport.

In contrast, in Year 12 different types of units of work (rather than subjects) and time allocations for categories of units formed the basis of a particular course. For example, in the electrical/electronics course in 1984, students completed six base units, six base-related units in Mathematics and English, and three optional units. In business studies and creative arts and media different ratios applied. Although the concept of negotiation in relation to course content, assignments and assessment was considered integral to the T12 program, the degree to which this occured varied in practice. In this particular school it was reported that some teachers had difficulty in adapting to this approach.

The impact of Year 12 arrangments on school organization. There had been some impact on the remainder of the school organization resulting from these Year 12 arrangements. Notwithstanding any concerns about the particular operation of the Year 12 program in this setting, the program had been successful in attracting greater numbers of students to the school. Year 12 enrolments in the school had grown from 42 in 1982 to 79 in February 1984. In 1984, the Year 12 group constituted just under 20 per cent of the student population, equalling Year 9 as the single largest year level.

It was probably this factor, more than any other, which had the effect of encouraging staff to decide to re-organize the Year 11 curriculum for 1985, using both the T12 unit structure and educational philosophy. While it was anticipated by staff that this would increase curriculum flexibility, and so permit the inclusion of studies from more than one core area in a student's program, it was conceivable that Years 11 and 12 courses could become to be perceived as a two-year program. If this eventuated it could be seen as contrary to the original intent of the T12 program, given that it was established with no pre-requisites and was to be equally available to students from both within and outside the school.

A further influence of the Year 12 program was seen in the decision to re-organize the structure of the Years 7-10 curriculum on a half year unit basis, but without necessarily promoting the T12 philosophy of curriculum negotiation. Although some staff members had hoped that the school could offer a common curriculum for all students in Years 7 to 10, parental and student opposition to the requirement that girls take trade subjects, forced modifications to these plans. Thus, in effect, while the curriculum for all year levels for 1985 was to be based on a unit structure, three different school organizational arrangements appeared likely to emerge. Years 7 and 8 would have a common curriculum, Years 9 and 10 would have a core with electives and, finally, Years 11 and 12 would be organized using T12-type course structures.

Summary. The T12 structure at this school appeared to provide a useful course of study for students who might otherwise have left school. Its presence had also stimulated interest in the curriculum at other levels.

Organizational Arrangements in Secondary Schools

In some aspects of organization secondary schools in Victoria appear to be uniform. For example, according to the 1984 survey, around 70 per cent of schools were organized on a cycle of 30 periods of 50 minutes duration per week. However, there was evidence that some schools had developed different organizational arrangements. This section of

the present paper outlines information about the extent and nature of developments with regard to subschools, program organization, and the grouping of students in Victorian post-primary schools.

Subschools

Of the secondary schools surveyed in 1984, around 18 per cent (74 schools) indicated the existence of some form of semi-autonomous subschool. The percentage was a little higher among Technical Schools (29 per cent) than in high schools (14 per cent) although the term may have implied different forms of subschool in each category. In elaborating on features of the subschools, 4 per cent of schools (17 schools) indicated that a split campus for senior years was involved. The figure for high schools alone was 8 per cent (6 schools). Around 3 per cent of all schools (11 schools) indicated that there was a separate administration for senior years. Only four High Schools were among those which indicated this organizational feature existed. In summary there were few schools which indicated the presence of a subschool structure. Even fewer reported the presence of a structure which involved separate provision for the senior years.

In elaborating in a more general sense on subschools, 7 per cent of schools described their structures as vertical subschools across year levels and 11 per cent described them as encompassing one or more adjacent year levels. For high schools alone, 6 per cent were in each of these categories. The first of these categories was intended to apply to the form of subschool which covered a significant number of the year levels through the school while the second was intended to apply to the form of school which distinguished a more limited grouping, say lower, middle and senior schools. Sturman (1982:55-65) has outlined various reasons why schools might adopt a subschool structure and the forms which they could assume. Among the secondary schools he described, the forms at Palmer and Pritchard schools would have corresponded to the first of the categories above and that at Lawson would have corresponded to the second.

A Series of Mini-Schools: School D

School D consisted of four mini-schools. The original specification of the school stated that the institution should be divided into four 'mini' or 'satellite' schools, each of 300 students. The division was to be vertical with each of the mini-schools covering a range from Year 7 to 10. They were to be separated geographically and provided with sufficient facilities and resources to service most curriculum needs, but they were to be linked to a Central Resources Complex, where specialist facilities and resources, administrative and ancilliary services would be sited. In practice, the mini-school arrangements only operated in a limited sense at Year 10. Although each mini-school had its own staff and an area of eleven classrooms, with provision for sharing joint facilities, the size of each was generally limited to about 200 students.

Mini-schools 1 and 4 were initially located at their separate settings prior to the construction of permanent buildings. Eventually these mini-schools absorbed

not only many of the staff of the two former schools but also some of the former schools' characteristics and outlook. By contrast, mini-schools 2 and 3 were initially housed in temporary accomodation at the new school site. When the new 'school' commenced operations these two mini-schools had a considerable number of teachers appointed to them. Although school publicity statements referred to students following the same course structure in Years 7 and 8, this was not strictly the case. Equally misleading was the claim that during Years 9 and 10 students continued to follow a common core. As a result the organizational patterns of each pair of similar mini-schools has been discussed and compared.

Horizontal mini-school arrangements: mini-schools 1 and 4. Mini-school 1 had a curriculum which was organized on a horizontal year-level basis with most subjects running for a full school year, although some arts and trade courses in Years 7 and 8 were rotated on a one-or two-term basis. Subjects were arranged, and students grouped, according to whether they were core subjects (English, Mathematics, Science, and Social Studies), other subjects (Arts, Trades, and Physical Education conducted on a year, one or two terms), or electives. Elective subjects were not offered to students until Year 9. At this year level students continued with their four core subjects, took two additional subjects and selected three out of 13 electives (each of three periods per week) which were offered in a joint program within the mini-school while electives were offered on a school-wide basis. English and Mathematics, as part of the core of mini-school 1, were block timetabled, for one or two year levels, to enable students to work in different groups according to their ability and potential.

Mini-school 4 was also organized on a year-level structure with flexible groupings provided by 'block-timetabling'. In English and Mathematics, for example, students were placed in ability groupings, while heterogeneous groups were used in activity subjects. In addition, team teaching and special interest groups in science consituted other student grouping arrangements. Although Year 8 in this mini-school did allow some element of choice in activity areas of study, the Years 7-8 program was basically a common, year-based curriculum structure. A core plus elective program structure was used for Years 9 and 10, and some electives at Year 9 were shared with mini-school 1. At Year 10 electives were shared on a school wide basis. An alternative activity-based integrated program was also provided for a small number of selected students for whom the year-level subject structure was deemed to be of limited value.

Alternative arrangements: mini-schools 2 and 3. In Mini-school 2, students in Year 7 spent the first two terms in class groups and pursued a standard subject-based curriculum. In term 3, students remained in class/home groups for almost half the week with the other half taken in the mini-school's vertical modular program. For Year 8 and 9 the curriculum was organized entirely within the vertical modular structure with Year 10 students remaining in the structure for 15 periods per week. Mini-school 2 defined a module as a class which runs for three periods per week over one term. Students in Years 8 and 9 took nine such modules each term. The common module format allowed for modules to be interchangable, at least in theory, on a student's timetable. The modules are referred to as vertical because they often contained students of different ages. Unlike some vertical curriculum structures, there were no pre-set course paths based on subject areas. Rather there were three components of the program which assisted the process of grouping students into modules appropriate to their abilities, interests, and special needs. By means of the first requirement - the stipulation of pre-requisites before particular modules may be attempted - an attempt was made to relate students' ability to a module's level of difficult. A second aspect was the survey procedure used by the mini-school as part of the course selection process each term. Towards the end of each term, each student in the mini-school received an individualised list of modules which he or she was qualified to take in the following term. After consulting with both home-room

teachers and parents, a student selected nine modules to appear on his or her timetable, along with a list of alternatives to be substituted if others could not be timetabled for the student either because insufficient students wanted a particular module (and so it was not run that term) or because two modules selected by the student needed to be timetabled together. Student interests and parent wishes were recognized in the course selection procedure. A third aspect was Basic Access Learning. Based on surveys of teachers, parents, students, and members of the community, the mini-school had developed a catalogue of skills, concepts, and attitudes which all students needed to gain if they were to become 'contributing (and) personally fulfilled members of society'. These were referred to as Basic Access Learning (BAL) and formed the basis of the mini-school's modules covering literacy, numeracy, vocational skills, personal development, and general knowledge. Thus, modules labelled BAL were required to be taken by all students and, if necessary, repeated when skill and concept development was revealed to be very weak. With this component, the need of all students for the development of basic skills, concepts, and attitudes has been recognized.

The points system administered by the mini-school operated in conjunction with the BAL labelling to help give students the necessary breadth of experience to make informed decisions abour their careers and future lifestyles. One point was awarded for the successful completion of each module. Minimum numbers of points had to be accumulated in each subject area to be credited with passes at Years 9 and 10 levels.

Whereas mini-school 1 organized its curriculum on a horizontal year level and mini-school 2 to a large extent used a vertical modular structure, mini-school 3 drew on a mix of both these structural forms. Years 7 and 10 students were organized on a year-level basis while the curriculum for Years 8 and 9 was arranged on a vertical year structure. At Year 7, classes undertook a common subject-based curriculum of English/Social Studies, Language/Multi-cultural Education, Media, Mathematics, Physical Education, Graphics, Science, Art, Woodwork, Sheetmetal Work, Home Economics, Music, and Interest Electives. In Years 8 and 9, vertical units ran for three periods per week each term. All students were required to take at least one unit of English, Mathematics, and Physical Education each term and, in the case of English and Mathematics, they were required on at least two occasions to attempt two units of both subjects. In addition, a number of other subject areas stipulated a minimum number of units that had to be attempted during Years 8 and 9. Out of a total of 60 units completed over the two-year period, 24 units were available for student choice. In Year 10, students did a basic course consisting of English, Mathematics, Science, and Social Studies. The remaining 15 periods per week were composed of five electives selected across the school's Year 10 elective program.

School-wide arrangements: elective program in Years 10, 11 and 12 courses. At Year 10, electives across the school were arranged in four blocks - academic subjects, arts and crafts, business studies, and Practical/Trade subjects. Students selected five of these electives, each of which ran for 3 x 50 minutes per week. At Years 11 and 12, horizontal year-level subjects were offered to students. At Year 11, for example, 31 subjects were offered in curriculum areas of Humanities, Mathematics, Science, Commercial and Secretarial, and practical and creative studies.

At Year 12, as a result of involvement in a Link Program with a neighbouring high school, a total of 21 VISE Group 1 and two VISE Group 2 subjects were available to students. The school also provided a T12 program in trade areas. At Years 10 and 11 an alternative, experienced-based curriculum was offered to students who had become disillusioned with their school experience. At Year 10, each student negotiated an individual program that comprised an appropriate English, 10 periods of work in the Experience Based Curriculum, and 15 periods in other classes. In contrast, at Year 11 the Experience Based Curriculum involved the study of three different themes, one in each term.

Summary. Organizationally, School D offered a variety of structural arrangements - mini-schools where students were grouped on horizontal or vertical arrangements (or combination of both); a separate horizontal structure for each of Years 11 and 12; and, a Technical Year 12 Program for those students not wishing to complete the Higher School Certificate.

Grouping Arrangements

Traditionally, secondary schools have been organized around subjects of one year's duration with teaching groups comprised of students from a single year level. In the discussion paper issued as part of the Ministerial Review of Post-compulsory Schooling (Victoria, 1984:26), the option of basing the curriculum in senior years on units of term or semester length with teaching groups being drawn from more than one year level was briefly mentioned. Such an arrangement has existed for some time in the senior colleges of the Australian Capital Territory (see Sturman 1982:247-250) and has been utilized at other year levels in some schools in Victoria (see Ainley, 1982:145-148; Sturman 1982:185-190).

Information from the 1984 survey about these aspects of school organizational arrangements has been recorded in Table 4.6. From those data it was apparent that most schools were organized around a year-based teaching program and most schools did not make use of vertical grouping arrangements. Vertical grouping and the use of term or semester arrangements for the teaching program were most common at Years 9 and 10. At Year 10, around one-quarter of the schools indicated a half-year (16 per cent) or term-based (9 per cent) arrangement for the teaching program. At Year 9 the figures were a little lower. These two year levels were also those in which vertical grouping was most frequently reported. Fifteen per cent (Year 10) to 17 per cent (Year 9) of schools reported that all students were in vertically-organized teaching groups for some or all of their subjects. A further 10 per cent (Year 9) and 17 per cent (Year 10) of schools reported that this arrangement applied to some students.

At the Year 10 level, the combination of a term or half-year-based program with vertical grouping was reported by 14 per cent of schools, with the corresponding figure at Year 9 being 15 per cent. If the schools which gave responses classified as 'other' or 'mixed' to the question about program organization were to be included with these figures, the percentages cited would rise by 2 or 3 percentage points. In summary, there appeared to be a small, but possibly important, percentage of schools which adopted organizational arrangements covering Years 9 and 10 involving a unit other than a full year as the basis for curriculum organization, grouped students from more than one year level for teaching purposes, or adopted both of these practices. The responses of students and teachers to these arrangements are discussed in later chapters. The operation of two schools with such arrangements is described below.

Table 4.6 The Incidence of Vertical Grouping Among Different Types of Program Organization in Victorian Secondary Schools (1984 Survey)
Percentages Recorded in Columns

Year level/ program organization	Vertical grouping arrangement				Number of valid cases
	None	All students[a]	Some students[a]	Total	
Year 7					
Year based	72	3	3	78	
Half year/Term based	8	4	1	13	364
Other/Mixed program	8	2	-	10	
Total	88	9	4		
Year 8					
Year based	66	3	4	73	
Half year/Term based	7	7	3	17	366
Other/Mixed program	8	2	-	10	
Total	81	12	7		
Year 9					
Year based	59	5	5	74	
Half year/Term based	8	10	4	17	369
Other/Mixed program	7	2	1	10	
Total	74	17	10		
Year 10					
Year based	53	4	11	68	
Half Year/Term based	10	10	5	25	371
Other/Mixed program	5	1	1	7	
Total	68	15	17		
Year 11					
Year based	56	4	17	77	
Half year/Term based	14	3	3	20	362
Other/Mixed program	2	-	1	3	
Total	72	7	21		
Year 12					
Year based	74	3	11	88	
Half year/Term based	6	1	1	8	314
Other/Mixed program	2	-	1	3	
Total	82	4	13		

[a] For all or some of their subjects.

Vertical Grouping in the Middle Years: Two Instances

Schools which have introduced vertical grouping in the middle school years have argued that there are advantages for students, teachers, and the school organization in this type of arrangement. For students it is argued that they can have tailor-made courses to suit their individual aptitudes. It is also argued that students are motivated by a commitment to their choice, and the short term goals. Students can also gain practical experience in making decisions. When work is not satisfactory in some areas the student can repeat the particular unit rather than the whole year. Advantages to teachers are seen to include the opportunity to specify short-term goals for units, the opportunity for more effective preparation of materials, and the opportunity to design units in areas of interest. Class control is claimed to be easier because there are ways of avoiding inappropriate combinations of students. Organizationally the schools operating vertical grouping claim there is more flexibility to adjust class sizes to match other conditions, greater capacity to utilize specialist facilities, greater opportunity to try new curriculum ideas and refine them, and more flexibility in the allocation of staff and the replacement of staff when changeovers occur at the end of term.

School E and school G. Both School E and School G had vertical modular arrangements for Years 8 to 10 with a more traditional year-level organization for Years 7, 11 and 12. The vertical organization of the middle school in both schools was based on a unit system which was intended to cater for both student and teacher interests and abilities through the provision of a broad range of offerings. Each of the schools, in varying degrees, saw the need to separate the last two years of formal schooling with the return to a year-long study of subjects. In the upper years of schooling, School E appeared to have a more academic emphasis than did School G.

Vertical grouping in practice: some impressions. Within a single category of school organization there can be variations in practice. The differences between School E and School G centred on three main areas: the duration of each unit, the levels of difficulty in units, and sequencing and pre-requisites. School E had based its system on term-length units and School G had operated with semester-length units. At School E, students studied seven units each term (each involving four 50-minute periods per week) and at School G students studied six units each semester (four 60-minute periods per week). Hence units at School G represent larger segments of study (about 80 per cent more time) than at School E. In this respect the two schools represented a difference in emphasis on an issue debated within both schools - the most appropriate balance between flexibility of structure and depth of study in each unit.

In the middle schools of both School E and School G, units were specified according to various levels of difficulty. In School E, there were two levels (Level 1 and Level 2) while at School G up to five graduations might be specified. However, these five graduations were not all used by every faculty and some units could be designated as multi-level.

Both School E and School G stipulated requirements for the completion of Year 10 and entrance to Year 11. At School E there was an established sequence in Mathematics and Language with units from these faculties being required each term. Completion of the middle school required students to attain 75 points based on one point for a level 1 unit passed, and two points for a level 2 unit passed. In addition two advanced level English units needed to be completed satisfactorily and at least six points needed to be obtained from each of the eight faculties. Additional pre-requisites were sometimes necessary for particular Year 11 courses. With each student undertaking fewer and longer units, the requirements of School G differed from those of School E. At School G, in Years 8 and 9 all students were required to complete Basic English, and in Year 8 all students took a Geography, History, and Home Economics unit. English and Physical Education

were compulsory at each semester, and Mathematics remained compulsory until a level 3 unit had been completed. Compared to School E less emphasis was placed on students reaching a particular standard before progressing to Year 9 or Year 10.

Both schools indicated ongoing support for the middle school organizations. Staff at School E had indicated in a recent vote strong support for the structure. The area which caused greatest difficulty was that of providing adequate advice to students in course planning. At School E the procedure had changed from being a responsibility of home group teachers to being mainly a responsibility of a few particular members of staff. In addition, problems arose when students could not be accomodated in their first preference for units. Those practical contraints sometimes limited the flexibility in the structure. At each school a few staff raised the issue of academic standards but there was little evidence on which to judge those claims.

In Summary

This chapter has been concerned with presenting descriptive information about the form of curriculum in Victorian secondary schools, and some of the organizational arrangements which existed in 1984. Among other things it shows the pattern of increase in subject choice between Years 7 to 10, and Years 11 and 12, the extent to which schools offerred other than Group 1 subjects in Year 12, and the extent of vertical grouping in the middle years of secondary school. Overall the information provides a sketch of general patterns in Victorian secondary schools and identifies the extent of some departures from those patterns. In the following section the responses of teachers and students in different structures will be examined.

CHAPTER 5

DECISION MAKING STRUCTURES

The establishment and support of structures through which decisions are made and implemented is an important aspect of school management. A description of decision making structures in the government secondary schools of Victoria was important to the present study for two reasons. First, it was to provide information about the structures for decision making in schools comprising a system where there had been a stated intention to devolve authority. In this sense the issue was relevant to the general proposition that the internal structures and procedures in an organization are influenced by the external environment in which they operate (Meyer et al., 1978). More specifically it has been suggested that for Australian government secondary schools the administrative pattern of the state system was reflected in its schools (Ainley, 1983). Hence, part of the present study was concerned with providing a perspective on where decisions were made within schools. Second, information about decision-making structures was to provide contextual data for other parts of the study. Information about linkages among teaching staff, perceived co-ordination of the school teaching program, and teacher job satisfaction could then be interpreted in the light of the structures which existed for making decisions.

This chapter makes use of quantitative and qualitative information in a complementary way. The quantitative data were derived mainly from the survey of teachers in 53 schools described in Chapter 3. In the present chapter those data were aggregated to give average school responses and used as the basis of between-school analyses. The two community schools were considered outliers in the sample and were excluded from the main analyses. Information from those schools was reported separately. The quantitative approach provided information about the levels within schools at which decisions about a range of issues were taken, and about the extent of participation in those decisions. Qualitative field work in seven schools provided additional perspectives about the ways in which internal structures related to each other and to external structures such as the School Council. On the basis of an analysis of documents in those schools and extensive interviews it was possible to discern patterns of relationships between structures.

Decision Making

Part of the study involved an examination of the points at which decisions were taken in schools and who was involved in those decisions. The study recognized that the levels at which decisions were made and who was involved would be dependent on what the

decision was about. However, it did not address the issue of how decisions were made or the stages (e.g. Lipham, 1984) involved in the decision-making process in schools. That would have involved a more intensive study in fewer schools. The approach was based on one used in a previous study (Ainley, 1982), but broadened in scope so as to gather the perspectives of all teachers rather than just the principal.

The question to teachers asked them to indicate who was involved in policy determination in several domains. The question stated:

> Who most often determines school policy and practices in each of the following areas?
>
> What is required here is your perception of school practice and not necessarily the formal responsibility as laid down in regulations or departmental instructions.

As can be seen from the alternative responses presented below, respondents were directed to consider internal school personnel. No quantitative evidence was gathered regarding other groups such as the school council. Where a response was given as 'other' the accompanying description was checked and a decision made as to whether it could be validly assigned to one of the listed codes. Where that was not possible the response was treated as missing. For each of a number of policy areas respondents were asked to indicate who determined policy by choosing the best descriptor from the following list:

A the Principal alone
B the Principal and senior staff
C the Principal and a staff group (e.g. curriculum committee or a staff meeting)
D the Principal and individual teachers
E the Head of Department alone
F the Head of Department and staff
G the Head of Department and individual teachers
H the Year Level Co-ordinator
I the Year Level Co-ordinator and the staff at that level
J the Year Level Co-ordinator and individual teachers
K the individual teacher
L other (please specify beside the item concerned)

The policy areas listed were based on previous studies and reflected three main groups of policy issues: general curriculum, instruction, and administration and resource allocation. For this discussion the 'general curriculum' issues are broad policy issues whereas issues of 'instruction' more specifically concern the detail of teaching. The specific policy areas included are listed below:

General school curriculum objectives
The range and balance of the curriculum structure at each year level
The content of each subject area
The methods of instruction
Selection of new books and materials
The form of internal assessment of particular year levels
Homework policy
The allocation of teachers to particular classes within subject areas
The allocation of non-teaching duties to teachers
Range and type of extra-curriculum activities
The allocation of duties to teacher aides

After the initial coding of the responses two indices were generated. First, an index of the level at which decisions were made was calculated. This reflected whether decisions were taken centrally (across the whole school), at a subunit level, or individually. Two types of subunit were defined: the subject department and the year level. Hence, in terms of the level at which decisions were taken there were four possible categories. The second index reflected the extent of participation in the decision and included four possible categories. On this index decisions could be taken hierarchically (made by a person or persons in designated positions), consultatively (made as a result of consultation between a designated position and other people), collegially (made by groups of people together), or individually (made separately by each teacher).

For each school in the sample, the percentage of teachers responding in each category was calculated and those percentages used as the basis for the analysis reported below.

Decision Levels

The overall patterns reflecting the levels at which various decisions were made within the schools have been represented in Table 5.1, which shows the average percentages of teachers per school indicating the level at which decisions were taken. Some categories of response attracted only a few respondents. These few respondents may have a different perspective on the issue from their colleagues either because they worked in a different section of the school or because they interpreted the question differently.

Matters of broad curriculum policy were mainly decided centrally, as would be expected. In the policy area concerned with general curriculum objectives for the school there was a nearly universal view expressed that these issues were decided at a central level. A majority reported that this was the level at which the range and balance of subjects offered at each year level was determined, although a significant minority reported that these matters were determined within a subunit - either a subject department or a year level. This difference reflected partly a variation in reporting by teachers within schools but mainly reflected differences among schools.

Policy issues more immediately concerned with teaching, designated as 'instructional policy', were reported to be determined at a more decentralized level than the broad policy matters. Subject departments were predominant as the places where matters concerned with the content of subjects and selection of new books and materials were decided. Individual teachers were reported as being the arbiters of methods of instruction although in a number of schools a significant number of teachers reported that decisions about these matters were determined within the subject department. One imagines that differences within schools would arise because not all subject departments in any school would function in the same way. There was less consensus about the decision points regarding internal assessment and homework policy. Internal assessment

was predominantly a matter for subject departments but there was significant influence, according to some teachers in some schools, from the centre or from year levels. Homework policy was seen mainly as a matter for decision by individual teachers but some respondents saw a significant role in this area for the centre, subject departments, or year levels. It seemed there were some differences between schools and between different sections of schools with regard to where homework policy was decided.

Decisions about matters concerned with administration appeared to be primarily determined centrally or within subject departments. The allocation of teaching duties was either decided within subject departments or at a central level. Allocation of non-teaching duties was mainly determined centrally with a small percentage of teachers ascribing these decisions to the subject departments. The range and type of extra-curricula activities was mainly decided at central level although a component of individual teacher decision making was involved. Teacher aides were allocated duties either at a central level or within subject departments. Given the different types of personnel employed as teacher-aides this variation in the pattern of responses is not surprising.

Table 5.1 suggests that most decisions about the policy areas surveyed were reported as being taken either centrally or within a subunit of the school: subject departments were the subunit to which most decision making was attributed. There is no direct quantitative evidence presented here of the extent of co-ordination of decision making or the extent to which decisions about subject content made in subject departments were consistent with the overall objectives and policies concerning curriculum range and balance which were determined centrally. These matters are discussed in later sections of the chapter.

The observations noted above referred to the general pattern across government secondary schools. In the data collected there were indications of variations between schools in the locus of decision making. The teachers in some schools reported more centralized decision making in some areas, while teachers in other schools reported more emphasis in a subunit or on individual teacher decisions. Some of those differences were associated with the type and size of school while others were not associated with any observable characteristic. The section below examines differences associated with such factors as size and type of school. The evidence from the qualitative field work examines some of the other issues associated with decision making in schools.

Type of school. There were several policy areas in which the responses from teachers in technical schools differed from the responses of teachers in high schools. In general, these differences indicated that in technical schools decisions about some policy areas were more likely to be made in subject departments and fewer teachers from these schools indicated that decisions were made centrally in the school. In policy areas

Table 5.1 Levels at Which Decisions Were Taken in Various Areas
(Average Percentage Response in Secondary Schools 1984)

Policy area	Levels of decision making			
	Central	Subject dept.	Year level	Indiv.
Curriculum Policy				
General school curriculum objectives	93[a]	-[b]	-[b]	-[b]
The range and balance of the curriculum structure at each Year level	64[a]	19[b]	15	-[b]
Instructional Policy				
The content of each subject area	-	80	-	13
The methods of instruction	-	26	-	71
Selection of new books and materials	-	83	-	-[b]
The form of internal assessment of particular Year levels	23	44[b]	12	15[a]
Homework policy	22[a]	23[b]	14[a]	41
Administration				
The allocation of teachers to particular classes within subject areas	34[a]	59[b]	-[a]	-
The allocation of non-teaching duties to teachers	89[a]	-[b]	-	-
Range and type of extra-curriculum activities	63	-[b]	-	26
The allocation of duties to teacher aides	53	39[b]	-	-

[a] Indicates a significant difference existed between high schools and technical schools with a higher mean score recorded for high schools.

[b] Indicates that the mean score for technical schools was significantly higher than for high schools.

Note: The numbers recorded in the table indicate the average (across all schools) of the percentage of teachers in each school who indicated that decisions about a given policy area were taken at that level (see text). '-' indicates an average response of less than 10 per cent.

concerned with administration and resource allocation, teachers in high schools were a little more inclined to view decisions as being made centrally, and a little less inclined to see decisions in those areas as being made in subject departments. These results were consistent with the traditional form of organization in technical schools where subject departments had a stronger influence than in high schools. The same pattern was evident with regard to the broad policy areas concerning school objectives and the range and balance of the curriculum at each year level and also with regard to internal assessment. With respect to homework policy, technical school teachers attributed decisions more to the subject department and less to either the central authority or the year level than did their peers in high schools. Overall, the evidence from the teachers who responded to this survey suggested that subject departments were seen as more significant decision making points in technical than in high schools.

Size and location of school. Associations between the levels of decision making in schools and the size and location of the schools were considered together because the size of a secondary school, as measured by its total enrolment, is closely associated with its location in either a metropolitan or non-metropolitan area (the value of the correlation coefficient was -0.57). To examine these associations two sets of analyses were undertaken. The first was intended to examine the simple associations between the percentage of teachers reporting a particular level of decision making in a given area and the size and location of the school. In doing this, both the means of given characteristics from groups of schools and zero order correlation coefficients were examined. Categories based on school size were formed by dividing the total sample into three equal groups on the basis of total July enrolment: small schools had less than 526 students, large schools had more than 798 students, and the medium sized schools had enrolments between those figures. When this was done, the differences between the mean percentage responses in each size category were compared. A similar comparison of the responses for metropolitan and non-metropolitan schools was made. The second set of analyses attempted to unravel the question of whether any observed differences were attributable to school size or to school location. This involved a more detailed analysis of correlations with size and location of school, including the partial correlations with size after controlling for location and the partial correlations with location after controlling for size. As a final step in the process a number of regression analyses using size and location as independent variables were conducted.

There were only a few policy areas in which there was a difference reported between schools of different size and in different locations. Most of the differences were observed in the areas concerned with instructional policy. Subject departments were a little more important in decisions about subject area content and the selection of materials in larger schools and metropolitan schools than in others. A greater percentage of teachers from non-metropolitan schools than metropolitan schools described decisions about homework policy as being made centrally, and decisions about selecting new books and internal assessment as being made by individual teachers. In the area of administration concerned with extra-curriculum activities, teachers from smaller schools and non-metropolitan schools more frequently described the decision as made centrally than did teachers in other schools. A small percentage of teachers from the small non-metropolitan schools also reported decisions about teacher aide duties as being made individually whereas very few teachers from metropolitan schools described those decisions as being made in this way. There was also a small difference in terms of the role of individual teachers in decisions about subject content: individual decisions were more common in small schools than large. Individual decision making above curriculum range and balance applied to very few resondents in total and arose from only the very small schools.

Table 5.2 Association Between Decision Levels and School Characteristics: Size and Location

Decision level and policy area	Partial correlation coefficients	
	Enrolment[a]	Location[b]
Central decisions regarding extra curriculum activities	-.32	-.04
Subject department decisions regarding subject content	.33	-.01
Subject department decisions regarding selection of materials	.27	.31
Year level decisions regarding homework policy	.26	.01
Individual decisions about subject content	-.30	.01
Individual decisions about assessment	-.26	-.11
Year level decisions regarding selection of materials[c]	-.14	-.29
Year level decisions regarding teacher allocation [c]	.26	-.01
Year level decisions regarding extra-curricular activities[c]	.29	-.07
Individual decisions regarding curriculum balance[c]	-.26	-.04
Individual decisions regarding teacher aides[c]	-.30	.08

[a] Controlling for location.
[b] Controlling for total school enrolment. Location is coded as 1 for non-metropolitan and 2 for metropolitan schools.
[c] These items refer to very few (less than 10 per cent) average responses.
Note: Coefficients significant at the five per cent level have been underlined.

When the partial correlation coefficients and the partial regression coefficients were studied, it appeared that the variations in the extent to which teachers attributed decision making to different levels in the school arose from differences in school size rather than from differences in location. Some relevant data are presented in Table 5.2. Only with regard to the role of year-level groupings in decisions about methods of instruction was there a difference attributable to location rather than size: in this instance, the year level was described as the point of decision making more frequently by city than country teachers. Differences between country and city schools in the role of the subject department were equally attributable to the effects of size and location. In all the other instances, where a raw difference was observed, the more detailed examination suggested that it was size of school which was important rather than school location.

In general the examination of patterns of responses from teachers in schools of different size and location showed a few small but statistically significant differences. Where those differences were observed, it appeared that the effect was better attributed to school size than to school location even though these two factors are linked together. In the overall pattern of responses it appeared that smaller school size was associated with more frequent reporting of both central decision making and individual decision making. Larger school size was associated with more frequent reporting of decisions being made at a subject department level. Even though those effects were rather small and applied to only a few of the policy areas, they are consistent with general theories linking organizational size to complexity and differentiation.

Participation in Decisions

The second index based on the responses given by teachers to the question about the making of decisions was intended to reflect the type of participation in those decisions. Involvement in decisions was classified as hierarchical (made by a person or persons in designated positions), consultative (made as a result of consultation between someone in a designated position and other people), collegial (made by groups of people together), or individual (made separately by each teacher). Results, showing the average percentage of teachers' responses in each school which could be classified in each category, are recorded in Table 5.3.

On the two broad policy areas which were concerned with general school objectives and curriculum range and balance, the most widely supported view was that decisions were collegial. Two of the policy areas described as instructional were previously indicated as being predominantly decided in subject departments: content of subject areas, and selection of books and materials. For those policy areas the most widely supported description was that decision making was collegial but in some cases it was described as consultative. Methods of instruction were largely an individual matter but where it was not so described it was considered to be determined on a collegial basis. It has been noted that assessment and homework policies were decided at various levels. In terms of the way decisions were reached about assessment the most widely supported description was that decision making was collegial, or sometimes consultative. Homework policy was reported as being determined on a collegial basis other than where it was an individual teacher decision.

The group of policy areas concerned with administration and resource allocation revealed a more varied pattern of responses than the areas considered above. The allocation of teaching duties was described by some as being decided in a collegial manner and by others as being decided hierarchically. Descriptions of decisions about the allocation of non-teaching duties was also divided between these two descriptors but the dominant view was that these were hierarchically decided. The allocation of teacher

Table 5.3 Type of Participation (Average Percentage Response) in Decisions in Specified Policy Areas

Policy area	Type of participation			
	Hierarchical	Consultative	Collegial	Individual
Curriculum Policy				
General school curriculum objectives	19	-	80[a]	-[b]
The range and balance of the curriculum structure at each Year level	14	-[b]	74[a]	-[b]
Instructional Policy				
The content of each subject area	-	17	66	13
The methods of instruction	-	11	17[b]	71[b]
Selection of new books and materials	-	26	62	-[b]
The form of internal assessment of particular Year levels	-	14	62	15[a]
Homework policy	-	-	42	41
Administration				
The allocation of teachers to particular classes within subject areas	38	16	45	-
The allocation of non-teaching duties to teachers	61	-[b]	32	-
Range and type of extra-curricular activities	20[b]	16	38	26
The allocation of duties to teacher aides	59	-	27	-

[a] Indicates a significant difference existed between high schools and technical schools with a higher mean score recorded for high schools.

[b] Indicates that the mean score for technical schools was significantly higher than for high schools.

Note: The numbers recorded in the cells indicate the average percentage of teachers in each school who indicated that decisions in a given policy area involved the type of participation indicated. Cells with an average response of fewer than 10 per cent have been left blank and designated '-'.

aides was also mainly seen as being hierarchically decided although there was some support for the view that these decisions were collegial.

Type of school. As shown in Table 5.3, there were few policy areas in which high schools differed from technical schools. In those few areas the trend was for high school teachers to report more often collegial decision making or for teachers in technical schools to report more often consultative decision making. However there was no general pattern across more than a few of the items.

Table 5.4 Participation Levels in Specified Policy Areas and School Characteristics: Partial Correlation Coefficients with Size and Location

Decision level and policy area	Partial correlation coefficients: Enrolment[a]	Location[b]
Consultative decisions regarding methods of instruction	-.19	-.30
Consultative decisions regarding materials selection	-.41	-.08
Collegial decisions regarding subject content	.35	.14
Collegial decisions regarding methods of instruction	.32	.12
Collegial decisions regarding materials selection	.46	.19
Consultative decisions regarding homework policy[c]	.30	-.08
Hierarchical decisions regarding instructional methods[c]	-.07	.30

[a] Controlling for the effects of location.
[b] Controlling for the effects of enrolment. Location is 1 for non-metropolitan schools and 2 for metropolitan schools.
[c] These items refer to very few (less than 10 per cent) average responses.
Note: Coefficients significant at the five per cent level have been underlined.

Size and location. Differences in levels of participation associated with the size and location of schools were mainly confined to instructional policy areas. Data concerning those areas in which an association with either size or location existed have been shown in Table 5.4. Teachers in larger schools reported more collegial participation in decisions about subject content and materials selection than did teachers in smaller schools. On the basis of evidence previously presented, decisions in both of these areas were taken in subject departments. The previous evidence also showed that some teachers reported that decisions about methods of instruction were taken in subject departments even though the majority had indicated that such decisions were individual. The data in Table 5.4 suggest that where the decision was not individual it was more likely to be collegial in a larger school compared with a smaller school.

Complementing the pattern above, it seemed that teachers in smaller schools reported more consultative decision making in two areas than did those in larger schools. These were the areas concerned with materials selection and methods of instruction, although in the case of instructional methods the coefficient did not quite reach statistical significance at the five per cent level. The effects observed were not present across all the policy areas listed but the direction could be interpreted as consistent with the notion that there were more formal participatory structures in larger schools and more informal consultative procedures in smaller schools. In the area of

methods of instruction there was also an effect of location after controlling for the associated effect of size. In that case there was tendency for more consultative decision making in non-metropolitan schools. This could be interpreted as being associated with a greater proportion of beginning teachers in those schools who would receive advice from the more senior teachers on the staff.

For administrative decisions, there were no linear effects of size revealed by the partial correlation coefficients presented in Table 5.4. However, in the allocation of teachers to both teaching and non-teaching duties there were some differences associated with school size which were non-linear and which became apparent only after inspecting the means for small (less than 526 students), medium (between 526 and 798 students), and large (more than 798 students) schools. Consultative decision making in these areas was more frequently reported in large and small schools but less frequently reported in medium schools. Complementing this pattern, collegial decision making was more frequently reported in medium size schools and less frequently reported in both small and large schools. These results are isolated at this stage and no explanation comes readily to mind. It is a finding which warrants further investigation.

Decision-Making Structures in Seven Schools

The sections above have considered evidence about where certain types of decisions were taken in the survey sample of schools and who was involved in those decisions. The evidence was concerned with the part played by the professional staff of schools and did not take into account the influence of School Councils in relation to the various decision making bodies within schools.

During 1983, schools in Victoria were asked to review the membership of their school councils in relation to a set of more broadly established principles (Victoria, 1983a) so that they would be broadly representative of parents, staff, and students. Parents were to constitute no less than one-third of the membership, staff no more than one-third, and adequate provision was to be made for student representation in a form which reflected school size and structure. In the seven schools in which interviews were conducted, there was some variation in size and composition of the council. Differences in school council size did not always reflect differences in the size of the school. At this stage there is no reason to suppose that the size of a council influences its effectiveness or that the range of functions performed is related to school size, but there is scope for a study of the way school councils operate in practice and the ways in which operations interact with other structures within schools.

All seven of the schools had internal committees usually, but not universally, called Curriculum Committees. Often the stated functions of the Curriculum Committees were similar to those of the Education Sub-committees of the School Councils. For

example, at School G the terms of reference of the Curriculum Committee included, among others, the approval and determination of general curriculum policy in the school, approval of broad programs offered within the curriculum, and determination of staff and resource allocations between different areas of the curriculum. These terms of reference overlap with what would be the responsibilities of the School Council. It is possible that the internal committees and the Council at School G dealt with these aspects of policy at different levels of specificity. For example, it is possible that the Curriculum Committee provided advice which was to be ratified, modified or rejected through the School Council structure, or that some Council responsibilities were delegated to the curriculum committee. It is an area of school governance about which more detailed study is needed.

One of the schools in the study had attempted to resolve potential conflicts by a formal reorganization of its structures. On the initiative of a small number of teachers, School D had reconstituted its Curriculum Committee with a membership consisting of five parents, five teachers, three students, and co-opted members. Formal provision had been made to ensure that there was one School Council member on this committee should none have been elected from among parent, teacher, and student groups. This committee became a subcommittee of School Council and was given the mandate to recommend curriculum policy to the School Council. The School Council has accepted that curriculum policy should refer not only to the content of courses but also the effects on student learning of such matters as staffing policy, facilities, teaching and learning styles, school organization, and assessment and reporting procedures. Another example of this restructuring process had ocurred in a school where the Education Sub-Committee of School Council and the (internal) Curriculum Committee had been disbanded. In their place, a Curriculum Planning Committee, as a sub-committee of School Council, had been formed, consisting of four teachers, four parents and four students. Under these and other arrangements it seemed likely that different approaches to the policy process would evolve. On a continuum this may, for example, range from all policy being developed by School Council and all implementation aspects being determined by professional teachers to both being determined by School Council or a sub-committee of it.

In three of the schools, there existed Administrative Committees to assist the school principal to determine allotments, class size, and organizational duties and to offer advice on administrative matters in accord with an industrial agreement (Victoria, 1983b). Similar functions were perfomed in other schools by groups known as a General Policy Committee, a Steering Committee, and the Staff Executive. In all cases the school principals retained the right of veto over decisions reached by these committes. In one of the schools, the terms of reference of this administrative committee had been extended so that decisions of the curriculum committee came to it as recommendations

for consideration. More generally, full staff meetings were used as a forum to receive and discuss issues which could not be resolved elsewhere.

From the impressions gained during the visits to these schools, it appeared that there were considerable opportunities for teachers to be involved in decision making and for administrative responsibilities to be widely spread. However, it also appeared that in some instances the domains of responsibility of various structures were not always clearly defined or understood and that this could sometimes result in a large consumption of staff time. It was not possible in the time available for the visits conducted in this study to examine these issues in any detail and they are raised here as possibilities for further reflection.

In Summary

The present chapter has been concerned with describing the decision-making structures in Victorian government secondary schools. It noted that different types of decisions were made at different levels. General curriculum policy decisions were made at a central level but on a collegial basis. Instructional policy decisions were made at various levels; subject content and materials selection were determined within subject departments; methods of instruction were determined by individual teachers (but with some involvement of subject departments); and homework and assessment policies were determined at a variety of levels across different schools. Administrative decisions in the areas listed in the study were taken either centrally or in subject departments.

Among government secondary schools there appeared to be some differences associated with type of school in that teachers in technical schools were a little more inclined to indicate that subject departments were important in making decisions about several policy areas than were teachers in high schools. There were also a few small differences associated with size of school. Smaller school size was associated with slightly more frequent reporting of both central decision making and individual decision making. In contrast, larger school size was associated with more frequent reporting of decisions being made at a subject department level. Those observations were consistent with general theories linking organizational size to complexity and differentiation.

From the more detailed information gathered in seven schools it appeared that there was some overlap in function between internal committees and school councils, and among the internal committees themselves. In some instances the domains of responsibility of various structures were not always clearly defined or understood. This sometimes resulted in the consumption of more time than should have been necessary, and the emergence of a new form of bureaucracy. Given the recent introduction of many new structures, it seemed that schools should review the structures which had emerged to examined how they related to each other and to the educational purposes of the school.

SECTION 3

AFFECTIVE ASPECTS OF SCHOOLING

This section of the report is concerned with teacher job satisfaction and student quality of school life. Information about these affective outcomes was derived from the fifty school study. The information presented is both descriptive for the government secondary school systems as a whole and analytic in the sense of seeking to explore some of the influences on these affective aspects of schooling. Chapter 6 discusses the patterns of communication among staff, perceptions of program co-ordination, and teacher job satisfaction. The issue of students' quality of school life is examined in Chapter 7. Chapter 8 provides a concluding chapter to the report as a whole and attempts to integrate some of the findings reported in its different sections.

CHAPTER 6

SCHOOL FACTORS AND TEACHER JOB SATISFACTION

This chapter explores the relationship between structural coupling (defined as the linkages among staff), co-ordination of the school teaching program, and teacher job satisfaction. In Chapter 2 it was argued that teacher job satisfaction would be influenced by the extent to which the teaching program was co-ordinated which would in term be influenced by the linkages among staff. In addition, each of these three aspects of school life was seen as potentially influenced by such school characteristics as school size, school type, and the social composition of the school population.

As well as exploring the relationships outlined above, the chapter provides data concerning the frequency of communication among different members of staff, the extent to which teachers perceived the school program to be co-ordinated, and the level of job satisfaction expressed with regard to different aspects of teaching.

The chapter draws on data from a survey of teachers in the sample of 53 schools described in Chapter 3. Overall 1646 teachers in those schools responded, representing a response rate of approximately 65 per cent. Those data were used as the basis of between-teacher analyses, and between-school analyses after the responses from teachers were aggregated to give average school responses. The two community schools included in the sample were outliers in the sense that they reported unusually high levels of structural coupling, had a staff and student body who chose to attend those schools, and were very small. Care was taken to ensure that these schools did not distort the general pattern observed across the other schools. For most between-school analyses, therefore, these two schools were excluded and reported separately.

Structural Coupling

In Chapter 2 the notion of structural coupling was introduced and defined as the mechanisms and norms of interaction among individuals which bind the parts of a system together. That introduction also noted that the measurement of structural coupling elsewhere had often involved examining the frequency of interactions between individuals. A different approach to the cohesiveness of the school program involved considering the perceptions held by individuals of the strength of the co-ordination in the system. This section is, however, concerned only with the reported interactions between individuals and not with perceptions of co-ordination.

Linkages Between Teachers

In the present study the general concept of structural coupling was subdivided to separate linkages between teachers, linkages between teachers and middle management

Table 6.1 Frequency of Communication in Specified Areas in Victorian Secondary Schools

	Mean score	Average mean per item	Interpretation
Teachers: planning jointly	15.5	3.1	'once per term'
Teachers: working together	11.4	2.9	'once per term'
Subject Co-ordinator: welfare	24.6[a]	3.5	'once per month - once per term'
Subject Co-ordinator: curriculum	21.7	3.6	'once per month - once per term'
Year Level Co-ordinator: welfare	27.0	3.9	'once per month'
Year Level Co-ordinator: curriculum	14.5	2.4	'once per term - once per year'
Principal: welfare	18.3[a]	2.6	'once per term - once per year'
Principal: curriculum	12.6	2.0	'once per year'

[a] The mean for technical schools was signficantly higher than for high schools.

(either the subject co-ordinator or the year level co-ordinator) and linkages between teachers and management (the principal or vice-principal). For the study of linkages between teachers, an adaptation of a measure of work system interdependence developed by Bridges and Hallinan (1978) was used. In that measure teachers were asked to indicate how frequently they engaged in activities such as jointly planned lessons. The nine activities could be split into two groups though there was a correlation between the two. One of the two groups was concerned with planning together (e.g. 'jointly select topics to be taught') and the other was concerned with working together (e.g. 'jointly teach lessons units or courses'). Details of the groups of items are contained in Appendix 1.

The areas in which teachers reported the most frequent interactions with other teachers were in 'jointly deciding how to handle discipline problems' (roughly once per month), 'jointly selecting instructional materials' (a little less than once per month,) and 'jointly selecting topics to be taught' (a little more often than once per term). Obviously this does not represent the total level of interaction between teachers in a school. It simply represents the frequency of interaction about a series of items chosen to represent joint planning and joint action. The average frequencies of interaction concerned with the items in the two groups have been shown in Table 6.1.

Linkages with Co-ordinators and the Principal

Linkages with both subject co-ordinators and year-level co-ordinators, and with the principal or a vice-principal, were examined using a method originally developed by Meyer and Cohen (1971). Teachers reported how frequently they talked with one of the designated people about a range of topics. For the present study, the 13 topics listed were intended to cover both curriculum or instructional issues (e.g. 'student reactions to a particular lesson') and student welfare issues (e.g. 'general student behaviour').

Subject co-ordinator. The most frequently mentioned items on which there was reported communication between teachers and a subject co-ordinator concerned the practical matter of 'getting teaching resources or supplies' (about once per month on average), followed by the student welfare area of 'general student welfare' (about the same frequency). Two other aspects of student welfare were reported as the next most frequent topic of communication, followed by the curriculum issues of 'general curriculum plans' and 'student reactions to a specific lesson' (with a frequency corresponding to about once every two months).

Year-level co-ordinator. Communication which was reported between teachers and a year level co-ordinator most often concerned student welfare issues. The most frequent topics reported concerned 'student behaviour in class', 'discipline of students', 'general student behaviour', and 'the welfare of particular students' (each about once per month on average). The topic from the curriculum and instruction area which was cited as the most frequent focus of communication was also partly welfare related, that is 'learning needs of particular students'. Talking about an issue such as 'general curriculum plans' with a year level co-ordinator was reported to take place on average about once every six months. The general pattern across Victorian secondary schools was that year level co-ordinators were mainly concerned with student welfare while subject co-ordinators were concerned with both student welfare and curriculum issues. The question raised by these observations concerns the extent to which there is co-ordination and coherence in the program across any year level.

Principal or vice-principal. Communication between teachers and either the principal or a vice-principal about the topics listed was reported as infrequent. The topics about which teachers most frequently reported talking with such people were 'general student behaviour', 'student welfare matters', and 'student behaviour in class'. Even for those topics, communication was reported on average as taking place less than once per term. Communication about curriculum matters was less frequent still. The most frequent of these matters was 'general curriculum plans', about which communication was reported as taking place about every six months.

Table 6.2 Frequency of Communication in Specified Areas by Type of School

	Mean school linkage score[ab]		
	High	Technical	F ratio
Teachers: planning jointly	15.5	15.4	0.0
Teachers: working together	11.3	11.9	3.3
Subject Co-ordinator: student welfare	23.3	28.4	29.2
Subject Co-ordinator: curriculum	21.7	21.8	0.0
Year level Co-ordinator: student welfare	27.4	25.9	2.7
Year level Co-ordinator: curriculum	14.2	15.3	3.1
Principal: student welfare	17.4	20.8	11.8
Principal: curriculum	12.7	12.1	1.0

a Based on a weighted N of 48. (unweighted N = 51)
b F ratios which indicate a significant difference have been underlined.

Association with School Characteristics

There was evidence that the strength of some linkages was associated with various school characteristics. The school characteristics about which data are reported here are the type of school (high or technical), the size and location of school, and the social background of its students (their socioeconomic and ethnic background). In the examination of associations between school characteristics and the strength of linkages two types of data are presented. First, measures of simple association are presented to indicate the observable patterns present in the data. Second, because the school characteristics are themselves related to each other, an attempt is made to unravel the relative influence of those factors which go together.

Type of school. In Chapter 2 a brief description of some differences between high and technical schools was presented in terms of the original orientation of each and the background of teachers. The data shown in Table 6.2 suggest that there were two areas in which there was evidence of different communication linkages in each type of school. Communication with the subject co-ordinators and principals or vice-principals about student welfare was more frequent in technical than high schools. That evidence is consistent with the material presented previously in this chapter and suggests that teachers in technical schools viewed the subject department more often as the locus of decisions than did high school teachers.

It was noted at the beginning of the present chapter that the two community schools had been excluded from the main analysis because they differed so much from the remainder of the sample. One of the areas in which they differed markedly was in the extent of communication. Teachers from those schools reported much higher levels of communication with each other than did teachers in other schools in the sample.

Table 6.3 Frequency of Communication (Linkage) Association with School Characteristics

Linkage	Characteristics			
	Size[a]	Location[b]	SES[c]	Ethnicity[d]
Teachers: planning jointly	-10	-13	-11	16
Teachers: working together	-34	-05	-42	28
Subject Co-ordinator: student welfare	-51	-36	-16	-20
Subject Co-ordinator: curriculum	-31	-30	-10	-05
Year Level Co-ordinator: student welfare	17	26	00	25
Year Level Co-ordinator: curriculum	-35	-30	-04	-14
Principal: student welfare	-42	-38	-12	-34
Principal: curriculum	-63	-49	11	-20

a Negative correlations indicate more communication in smaller schools.
b Location is coded as 1 for non-metropolitan schools and 2 for metropolitan schools. Negative coefficients indicate more communication in non-metropolitan schools.
c Average socioeconomic status based on father's occupation coded on the six-point ANU scale. Negative coefficients indicate more communication in schools with a lower average socioeconomic status.
d Ethnicity measured as the percentage of students with a father of non-English speaking background.
Note: Coefficients significant at the five per cent level have been underlined.

Size and location of school. As noted in a previous section, size and location of school were associated with each other, which is a reflection of the fact that non-metropolitan schools are generally smaller than city schools. The average socioeconomic status of the student population and the percentage of students of a non-English-speaking background were also associated with each other in that schools where the average socioeconomic status was lower also had more students of a non-English-speaking background ($r = -0.63$). School location was also associated with the percentage of students of non-English-speaking background ($r = 0.52$) which reflected the greater preponderence of migrant families in city schools. In these circumstances, the simple unadjusted measures of association between various linkages reported in Table 6.3 need to be interpreted with caution.

According to the evidence in Table 6.3 several of the linkages were stronger in smaller schools than larger schools, and in non-metropolitan than metropolitan schools. The question then arises as to whether this pattern emerges because such linkages were more easily maintained in small schools or whether the effect was due to the nature of the non-metropolitan environment in which many such schools were located. The partial correlation coefficients reported in Table 6.4 provide measures of association between the criterion variable and school size (after a statistical control was made for the effect

Table 6.4 Frequency of Communication (Linkage) Association with Size and Location of School

Linkage	Simple correlation coefficients		Partial correlation coefficients	
	Enrolment	Location	Enrolment[a]	Location[b]
Teachers: planning jointly	-.10	-.13	-.03	-.09
Teachers: working together	-.34	-.05	-.38	.19
Subject Co-ordinator: student welfare	-.51	-.36	-.40	-.10
Subject Co-ordinator: curriculum	-.31	-.30	.19	-.15
Year level Co-ordinator: student welfare	.17	.26	.03	.20
Year level Co-ordinator: curriculum	-.35	-.30	-.23	-.13
Principal: student welfare	-.41	-.38	-.27	-.19
Principal: curriculum	-.63	-.49	-.49	-.21

a Controlling for location.
b Controlling for enrolment.
Note: Coefficients significant at the five per cent level have been underlined.

of the location) and between the criterion and location (after a control was made for the influence of school size). On that basis it seemed that the influence on each of the linkages represented by the variables shown in that table operated through school size rather than school location. In terms of teachers working together, more frequent linkages with the subject co-ordinator about student welfare, with a year level co-ordinator about curriculum, and with the principal about both student welfare and curriculum, were reported in small compared with large schools. In many of the subsequent analyses school size has been included rather than location because it seemed to be the more important explanatory characteristic.

Social characteristics of the student body. The information presented in Table 6.3 suggested no consistent association between staff linkages and the socioeconomic status of the student body, although there was more work interdependence among teachers in schools serving students of lower socioeconomic status than in schools with students of high socioeconomic status. That also appeared to be true for schools with high proportions of their students from non-English-speaking backgrounds. Schools with a higher percentage of students of non-English-speaking background also had stronger links with the year level co-ordinator about student welfare and less strong links with the principal about those issues. Given the lack of consistency in the pattern observed it is not possible to reach a simple interpretation of these results.

School characteristics and linkages: An integrated view. In order to understand better the ways in which school characteristics were associated with patterns of linkage, a series of multiple regression analyses were conducted. In these analyses the dependent variables were the eight measures representing different types of linkage described in sections above. The independent variables were school size, school type and a composite measure of social background.

In addition to using the eight measures of structural coupling between staff, a composite overall measure was formed as a summary measure. Seven of the eight separate measures correlated highly with the total and they were combined to give the overall composite. One of the measures (the student welfare in relation to the year level co-ordinator) did not correlate with the total and was not included in the composite measures of linkage in the school. It is possible that separate analyses using different combinations of components might provide more detailed results. This possibility will be explored in subsequent investigations. Results for the eight individual regression analyses and the analysis involving the composite general measure are shown in Table 6.5.

Two types of statistic are shown in Table 6.5. The multiple regression coefficients indicate the extent to which the school characteristics included account for the variation in the linkage scores between schools. The standardized regression coefficients indicate how strongly each variable is related to the linkage score compared with the other variables in the equation. From the data referring to the separate linkage scores, it seemed that there was a general pattern of stronger linkages in smaller schools, after allowing for influence due to school type and the social background of students. The only linkages where there was no statistically significant association between school size and the criterion variable concerned teachers planning together and communication with the year level co-ordinator about student welfare. School type was a statistically significant influence on the linkages with the subject co-ordinator and with the principal regarding student welfare. In technical schools these links were reported to be stronger than in high schools. For only one of the defined linkages was there an association with the social background of students. Teachers were more likely to work together in schools with lower scores on this composite variable than in schools with higher scores. In other words there was more activity involving teachers working together reported in schools with students of lower socioeconomic status and with more students of a non-English-speaking background.

On the overall composite measure of the strength of linkages within the schools, some 46 per cent of the variance could be attributed to differences in the characteristics of the schools. The most important of the influences was size. Stronger linkages were reported in smaller rather than larger schools. School type was also associated with the overall strength of the linkages, although the higher scores for technical schools arose mainly through the role of the subject co-ordinator and the principal in student welfare.

Table 6.5 School Characteristics and the Magnitude of Various Linkage Scores

Dependent variable	Standardized regression coefficients for independent variables			Multiple correlation coefficient
	Enrolment[a]	School type[b]	Social background of students[c]	
Teachers: planning jointly	-.14	-.04	-.18	.20
Teachers: working together	-.43	.18	-.44	.60
Subject co-ordinator: student welfare	-.49	.61	.01	.79
Subject co-ordinator: curriculum	-.31	.00	.03	.31
Year level co-ordinator: student welfare	.14	-.25	-.15	.32
Year level co-ordinator: curriculum	-.34	.25	-.02	.42
Principal: student welfare	-.38	.46	.11	.61
Principal: curriculum	-.63	-.15	.02	.65
Linkage	-.56	.37	-.02	.68

a Enrolment based July 1984 data.

b School type coded as 1 for high schools and 2 for technical schools.

c The composite measure of the social background of students was formed as the sum of the standardized scores of socioeconomic status and the percentage of students of non-English-speaking background.

Note: Coefficients significant at the five per cent level have been underlined.
Based on a weighted N of 48 (unweighted N = 51).

Table 6.6 Teachers' Views of Co-ordination: Frequencies and Means for Scale Items

Item	Percentage agreement[a]	Mean response
There is extensive communication about the teaching process.	46	2.38
Teachers consult with each other about their teaching.	65	2.72
There is sufficient contact between different sections of the school in curriculum planning.	35	2.17
There is effective co-ordination of the curriculum.	46	2.37
Teachers consult with subject co-ordinators about their teaching.	65	2.69
There is extensive communication about the curriculum.	39	2.30
Teachers consult with year level co-ordinators about their teaching.	35	2.20

N = 1646 teachers.

a Indicates the percentage of respondents who either 'mostly agreed' or 'definitely agreed' with the item.

Co-ordination of the School Program

Teachers in the study were asked to indicate the extent to which they saw the schools' teaching programs as co-ordinated. To do this, teachers indicated whether they agreed with seven statements about the co-ordination of teaching activities in the school. There were four possible levels of agreement available: definitely agree, mostly agree, mostly disagree, and definitely disagree. The approach was one adapted from a similar measure developed by Hoy (1979) for use in elementary schools. In examining the responses, both the pattern of individual item responses and the total scale scores were analysed.

The General Pattern

The teachers who responded to this questionnaire expressed mixed views about the extent of co-ordination of the teaching programs in their schools. Statistics relating to these views are contained in Table 6.6. Around 65 per cent of the responding teachers agreed (either 'definitely agreed' or 'mostly agreed') that teachers consulted each other about their teaching and the same percentage indicated that teachers consulted with subject co-ordinators about their teaching. A little less than half (46 per cent) agreed

Table 6.7 Results of Regression Analysis of Co-ordination on Linkage and School Background Characteristics

Independent variables	Dependent variables[a]			
	Linkage		Co-ordination	
	Metric.	Stand.	Metric.	Stand.
Social Background of Students[b]	-0.01	-.02	.01	.14
School Enrolment[c]	-0.02	-.56	00	.10
School Type[d]	9.26	.37	-1.87	-.55
Linkage			.06	.46
Multiple R	.68		.56	
Adjusted R^2	.43		.25	

a Metric regression coefficients are designated as Metric. Standardized regression coefficients and designated as Stand.

b The composite measure of the social background of students was formed as the sum of the standardized scores of socioeconomic status and the percentage of students of non-English speaking background.

c Enrolment based July 1984 data

d School type coded as 1 for high schools and 2 for technical schools.

Note: Coefficients significant at the five per cent level have been underlined.

N = 51 schools weighted to be equivalent to 48 schools.

with the statements that there was extensive communication about the teaching process or that there was effective co-ordination of the curriculum. Even fewer agreed with statements concerning more general aspects of co-ordination. Thirty-nine per cent agreed that there was extensive co-ordination of the curriculum, and 35 per cent agreed with the statements that there was sufficient contact between different sections of the school in curriculum planning and that teachers consulted with year level co-ordinators about their teaching.

Relations with Linkages and School Characteristics

In the introductory chapters it was postulated that more extensive linkages in the school would be associated with stronger co-ordination and that other school characteristics might also influence the strength of the co-ordination within the school. To explore these associations a set of multiple regression analyses was conducted using the schools as the unit of analysis. For the between-school analyses of linkages reported in the previous section, the two community schools have not been included in the results presented. They were considered outliers from the general pattern and are discussed separately.

The multiple regression analyses enable an examination of the associations between variables on an 'other things equal basis'. Table 6.7 contains the results of the analyses

which were conducted and Figure 6.1 displays those results in the form of a path diagram. From the results presented in Table 6.7 and Figure 6.1, it can be seen that the strength of co-ordination was related to the extensiveness of the linkages within the school. Where the extent of linkages was greater there was strong co-ordination reported, other things being equal. In addition, the extent of linkages was greater in smaller schools so that there was a transmitted effect of school size on co-ordination, although this effect was not large. There was no direct effect of school size on co-ordination - all the influence was transmitted through the extensiveness of the linkages in the school.

The other influence on co-ordination was type of school (representing high school or technical school). Other things equal there was a direct effect of type of school: teachers in technical schools perceived less co-ordination than teachers in high schools. However this direct effect was compensated by an indirect effect through which technical schools showed more extensive linkages and through which these more extensive linkages were associated with stronger co-ordination. The net result of these two competing paths was that on balance technical schools showed less strong co-ordination than high schools, at least according to the teachers in those schools. In other words the direct effect was stronger than the transmitted effect. There was no statistically significant influence of social background on linkage or co-ordination.

Linkage and co-ordination. Having suggested that there was an overall association between linkage and co-ordination, an examination was made of associations between

Figure 6.1 Path Diagram Linking School Characteristics, Linkage, and Co-ordination

Note: Only paths for which the regression coefficients were statistically significant have been shown. The sizes of the path coefficients provide an indication of the strength of the associations between variables.

Table 6.8 Associations Between Components of Linkage and Co-ordination after Controlling for School Size, Type and Social Composition[a]

Linkage component	Partial correlation coefficient[b]	Standardized partial regression coefficient[b]
Teachers: planning jointly	.22	.20
Teachers: working together	.13	.15
Subject Coord: welfare	.07	.11
Subject Coord: curriculum	.11	.11
Year Level: welfare	.22	.20
Year Level: curriculum	.53	.52
Principal: welfare	.26	.30
Principal: curriculum	.43	.50

[a] Based on 51 schools (excludes two community schools) weighted to N = 48.
[b] Allowing for school size, school type and social composition.

co-ordination and the different elements which made up the composite linkage score (see Table 6.6). It seemed that the observed association between linkage and co-ordination arose from the elements of the linkage score concerned with curriculum: the two strongest associations involved communication with the principal or vice-principal about curriculum matters and communication with a year level co-ordinator about curriculum matters.

Overall, the variables in this analysis accounted for a moderately high proportion of the differences between schools in reported co-ordination. The value of the multiple correlation coefficient was 0.56 which indicates that in combination these variables accounted for about 31 per cent of the variance in school co-ordination scores.

Type of school and co-ordination. To probe more extensively the nature of the observed difference in co-ordination between high schools and technical schools, the responses to each of the items constituting the co-ordination scale were studied. Mean scores on each of the items have been shown in Table 6.5. On three of those items there were no differences between high schools and technical schools ('extensive communication about the teaching process', 'teachers consult with each other about their teaching', and 'teachers consult with year level co-ordinators about their teaching'). On the remaining four items there were statistically significant differences with higher scores being recorded for high schools. The four items were 'there is sufficient contact between different sections of the school in curriculum planning', 'there is effective co-ordination of the curriculum', 'teachers consult with subject co-ordinators about their teaching', and 'there is extensive communication about the curriculum'. In other words the differences concerned the more broadly curriculum-oriented aspects of co-ordination. In passing, an apparent contradiction between these results and those concerning the importance of the subject department in technical schools can be noted.

Table 6.9 Differences Between Types of School in Teacher Perceptions of Co-ordination

Item	Mean		F ratio
	High	Tech	
There is extensive communication about the teaching process.	2.41	2.29	2.1
Teachers consult with each other about their teaching.	2.76	2.65	2.7
There is sufficient contact between different sections of the school in curriculum planning.	2.26	1.98	9.0
There is effective co-ordination of the curriculum.	2.44	2.16	8.6
Teachers consult with subject co-ordinators about their teaching.	2.75	2.55	10.7
There is extensive communication about the curriculum.	2.37	2.16	5.3
Teachers consult with year level co-ordinators about their teaching.	2.22	2.09	3.0

N = 1646 teachers.

The resolution of this can be seen in the results concerning linkages. There it was found that in technical schools there was more frequent communication about student welfare with the subject co-ordinator than in high schools but no more frequent communication about curriculum. It is possible that the subject department could be important administratively and in terms of specifying the curriculum in that subject, but not necessarily fulfill a major role in linking the teaching activities of the department together, or linking those activities with other departments.

General Patterns of Teacher Job Satisfaction

Information about teacher job satisfaction was obtained from a component of the teacher questionnaire. That part of the teacher questionnaire contained 19 statements about different aspects of schools which could influence job satisfaction. Teachers who responded could indicate how satisfied they felt with regard to that aspect of teaching on a six point scale ranging from highly dissatisfied to highly satisfied. They were also given the option of indicating that the item was not relevant to them.

These 19 statements had been included to measure job satisfaction in relation to three underlying aspects of teaching in schools; the organizational environments, students and working conditions.

Summary statistics derived from the responses by teachers to the questions about job satisfaction have been recorded in Table 6.10, which detail for each of the items, the percentage of teachers who expressed satisfaction (slightly satisfied, moderately satisfied, or highly satisfied), the mean rating (based on teachers responses being assigned a score from 1 respresenting highly dissatisfied to 6 representing highly satisfied), and the standard deviation of the ratings given by teachers. In Table 6.10 the items (some have been abbreviated) have been listed in the three domains and, within each domain, in order of increasing levels of satisfaction. A mean rating of 3.5 corresponded to the midpoint of the possible range and indicated roughly that half the teachers expressed satisfaction rather than dissatisfaction with that aspect of teaching. A mean rating of 4.3 roughly corresponded to three quarters of the teachers expressing satisfaction although the point of correspondence would depend on the distribution of the responses to the particular item.

More than half the teachers were not satisfied with the opportunities for useful in-service education. In Table 6.10 a similar item from the organizational environment scale (the provision of useful advice to assist you with problems you encounter in teaching) was also given a low average rating as a source of satisfaction. From these data it would appear that the area of in-service education and within school support for teachers is in need of attention, at least with regard to teacher job satisfaction.

On other aspects of the organizational environment a clear majority expressed satisfaction. Seventy-one per cent were satisfied with their involvement in decisions about school policy, and over 80 per cent were satisfied with the expectations held for them and their relationships with senior staff and other teachers. Almost all were satisfied with their freedom to select teaching methods including 61 per cent who were highly satisfied with this aspect of teaching. Most teachers expressed satisfaction with those aspects of teacher job satisfaction most likely to be influenced by school organization.

In terms of working conditions there were two other areas in which the level of satisfaction expressed by teachers was relatively low compared to other items. The first concerned resources. Only about half of the teachers were satisfied with the availability of ancillary staff. This result is consistent with the low level of provision of ancillary staff in Victorian government schools compared with those in other States (see Ainley, 1982). The second item was concerned with the work load aspect of working conditions. Only sixty-one per cent were satisfied with the preparation time available to them. More than two thirds of the teachers expressed satisfaction with the remaining aspects of working conditions shown in Table 6.10.

There was a spread in the levels of satisfaction expressed with the different items concerned with students. Almost all teachers were satisfied with their relationships with students. Thirty-four per cent were highly satisfied, 53 per cent were moderately

Table 6.10 Levels of Teacher Job Satisfaction

Item	Mean	SD	Per cent satisfied
Organizational Environment			
The provision of useful advice ...	3.7	1.5	61
Your involvement in decisions about school policy.	4.1	1.5	71
The expectations of senior staff held for you as a teacher.	4.7	1.2	86
Your relationship with senior staff ...	4.9	1.2	89
Your relationships with other teachers ...	5.1	0.9	94
Your freedom to select teaching methods.	5.3	0.8	97
Students			
The attitudes of students towards learning.	3.2	1.4	44
The general behaviour of students in the school.	3.5	1.6	51
The ability level of students in your classes.	3.9	1.3	64
The average level of student achievement in your classes.	4.0	1.3	68
The general behaviour of students in your classes.	4.3	1.4	75
Your relationships with students.	5.1	1.0	93
Working Conditions: Workload			
The preparation time available during the school day.	3.8	1.6	61
The amount of preparation and correction required of you.	4.0	1.4	68
The number of hours of non-teaching duties each week.	4.2	1.5	70
The number of hours you teach each week.	4.7	1.3	82
Working Conditions: Resources			
The opportunities for useful in-service education.	3.1	1.6	44
The availability of ancillary staff to assist you.	3.5	1.7	52
The availability of library and a-v resources.	4.4	1.5	77

N = 1646.

satisfied, and a further six per cent were slightly satisfied with their relationship with students. On the other hand fewer than half were satisfied with the attitudes of students towards learning and barely half were satisfied with the general behaviour of students in the school. It appeared that in terms of teacher job satisfaction teachers respond

differently to different characteristics of the student population. Interestingly, although barely half were satisfied with the general behaviour of students in the school, three quarters were satisfied by the behaviour of students in their own classes.

Influences on Teacher Job Satisfaction

The study in fifty schools examined the way in which background characteristics of schools and other influences were associated with each aspect of teacher job satisfaction. The early chapters of the report postulated an explicit link between perceptions of co-ordination and the satisfaction of teachers with the organizational environment. It was argued that, after an allowance was made for other factors, teachers would be more satisfied with the organizational environment if they perceived the school's program to be effectively co-ordinated. The other factors seen as potentially influencing co-ordination and job satisfaction with the organizational environment were background characteristics of the school and the linkages between staff. The model was outlined in Chapter 2 and that part of it which was relevant to co-ordination was examined earlier in this chapter. The present section extends that analysis to consider teacher job satisfaction.

There was less discussion of the two remaining aspects of teacher job satisfaction in Chapter 2. However it was considered possible that teacher job satisfaction in relation to students could be related to the social background of the students in the school, or to other characteristics of the school (for example attitudes could differ between types of school, or the issues which gave rise to lack of satisfaction with students could be less of a problem where linkages were extensive and co-ordination was effective). Equally it was considered possible that school size could influence teachers' satisfaction with their work load; or that effective co-ordination could lead to greater satisfaction with work load.

Analysis

The approach adopted for each of the three domains of teacher satisfaction was the same as outlined previously. Teacher scores were aggregated to give school mean scores and the resultant measures were then used in a between-school analysis. The two community schools were not included in the main analysis. Separate comment about the effect which would be observed if they had been included can be found at the end of the discussion of the results obtained from the main analysis. Table 6.11 contains the results of the three regression analyses using measures of each of the aspects of teacher job satisfaction as the dependent variable.

Table 6.11 Results of Regression Analysis of Measures of Teacher Job Satisfaction on School Level and Background Influences[a]

Independent variables	Dependent variables: Satisfaction 1 (Organizational environment) Metric	Satisfaction 1 Stand.	Satisfaction 2 (Students) Metric	Satisfaction 2 Stand.	Satisfaction 3 (Workload) Metric	Satisfaction 3 Stand.
School Type[b]	-.37	-.10	-5.07	-.68	-.24	-.07
Enrolment[c]	.00	-.12	.00	-.06	-.03	-.55
Social Composition[d]	.02	.27	.06	.34	.02	.21
Linkage	.02	.12	.03	.10	-.03	-.19
Co-ordination	.68	.62	.07	.03	.10	.10
Multiple correlation coefficient	.84		.80		.60	

a Based on a weighted sample of 51 schools (weighted N = 48). The two community schools have been excluded.

b School type is a dichotomous variable coded as 1 for high schools and 2 for technical schools.

c Enrolment is based on the July 1984 enrolment figures.

d Social composition is a composite measure which is the sum of the standardized scores for socioeconomic status and percentage of students of a non-English-speaking background.

Note: Coefficients significant at the five per cent level have been underlined.

Satisfaction with the Organizational Environment

The results presented in Table 6.11 show two direct influences on teacher satisfaction with the organizational environment. First, there was a strong relationship between the effectiveness of co-ordination and job satisfaction, confirming what had been proposed in Chapter 2. Second, satisfaction with the organizational environment was higher in schools serving student populations of higher socioeconomic status and with fewer students of non-English speaking background. No other direct effects were statistically significant but those factors which were shown to influence co-ordination would have a transmitted effect on satisfaction with the organizational environment. In other words linkage and type of school would have influenced teacher satisfaction with the organizational environment because they each influenced the effectiveness of co-ordination. Proceeding one step further back in the chain of influence, school size would have influenced satisfaction with the organizational environment through its effect on linkage and co-ordination. The overall path coefficient for the indirect effect can be estimated from the product of the three individual path coefficients as -.16. The pattern has been illustrated in Figure 6.2.

Satisfaction with Students

Two characteristics of schools were related to teacher job satisfaction with regard to students (see Table 6.11). First, as had been postulated, teacher satisfaction with students was higher in schools where students rated more highly on the composite social background measure. There could be several plausable interpretations of this including the possibility that teachers find greater satisfaction teaching students of similar background to themselves, or the possibility that fewer visible discipline problems arise for teachers in schools located in areas of higher social status. Exploration of possible explanations remains as a prospect for further studies. Second, teacher satisfaction with students was lower in technical schools than high schools. It was not clear whether this was because the students in technical schools presented more problems than those in high schools or whether the teachers in the two systems had different attitudes to the same sort of students. Neither linkage nor co-ordination was found to be significantly associated with teacher satisfaction with students. The overall pattern has been illustrated in Figure 6.3.

Satisfaction with Work Load

Teacher's satisfaction with their work load was higher in schools which were relatively smaller. Detailed results have been shown in Table 6.11 and illustrated in Figure 6.4. This effect of school size on job satisfaction was direct. It did not arise because of more extensive communication or perceived co-ordination. Although there is no readily apparent explanation for this observation, it could arise because less of a teacher's time is occupied in administration and management in smaller, as apposed to larger, schools. Associations between satisfaction with work load and either program co-ordination or the social composition of the school were not statistically significant. However, there was a tendency for higher levels of satisfaction to be recorded in schools serving more affluent populations. Detailed results have been shown in Table 6.11 and illustrated in Figure 6.4.

The Effect of Including the Two Community Schools

It has been argued that the two community schools should be ommitted from the general between-school analysis of school management and co-ordination. This was because the extremely high values shown on the structural coupling measures tended to distort the general pattern which applied to the remaining schools. Since the community schools were also very small, their inclusion would have strengthened the observed relationship between school size and linkage. It was argued that the effect of including these schools could have been spurious since they were staffed by teachers who chose a particular mode of operation and were attended by students who chose a particular type of school.

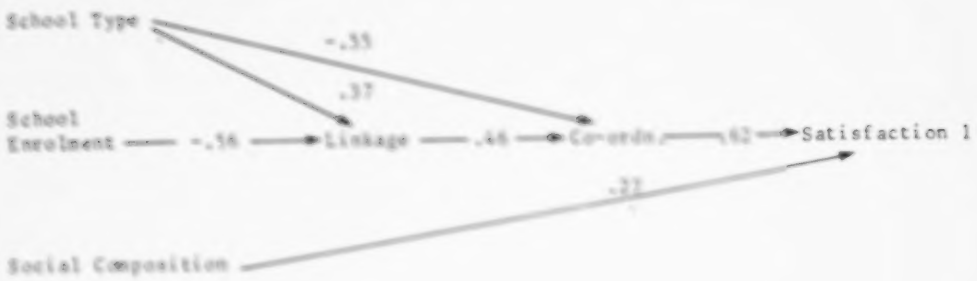

Figure 6.2 Path Diagram of Influences on Teacher Satisfaction with Organisational Environment

Figure 6.3 Path Diagram of Influences on Teacher Satisfaction with Students

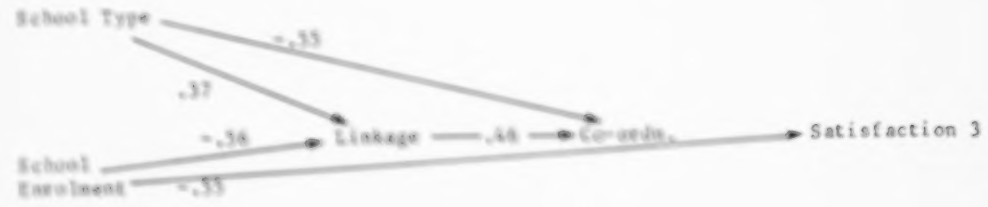

Figure 6.4 Path Diagram of Influences on Teacher Satisfaction with Workload

In practice the inclusion of the two community schools in the analysis of co-ordination and teacher job satisfaction did not alter the main results obtained.

In terms of the linkage and co-ordination analyses inclusion of the two community schools would have resulted in the elimination of the significant path between school type and linkage. In other words, with these schools grouped as high schools, technical schools would not appear to have higher linkage scores than high schools. The other relationships remained present although the magnitude of some of the path coefficients was altered.

The main relationships between school characteristics and the three aspects of teacher job satisfaction described above were not affected by the inclusion of the two community schools. However, given the small size of these schools, their very high linkage scores, and their higher than average scores on co-ordination and teacher job satisfaction, some additional paths were observed in the revised analysis. There was a significant direct path from school size to satisfaction with the organizational environment which suggested greater satisfaction in smaller schools. In addition there were significant (negative) paths from linkage to satisfaction with the organizational environment and to satisfaction with work loads; both of these were a consequence of the very high linkage scores in the community schools. Overall it seemed the results obtained from the analyses in which the community schools were excluded would not be altered greatly by their inclusion.

In Summary

The results presented in this chapter have concerned the frequency of communication among staff, the extent to which teachers perceived co-ordination of the teaching program as effective and teacher job satisfaction. In general topics concerned with student welfare (e.g. discipline, behaviour) were the most frequent subject of communication among staff. In terms of communication with staff in designated positions, it seemed that communication about student welfare was directed to both the year level co-ordinator and the subject co-ordinator, but with the former being more frequently involved than the latter. Communication about curriculum was predominantly directed to the subject co-ordinator with the year level co-ordinator becoming involved infrequently. Communication with the principal or vice-principal about curriculum issues were very infrequent. Overall, teachers were divided about the effectiveness of co-ordination of the curriculum. Fewer than half agreed with the propositions that there was sufficient contact between different sections of their school, that there was effective co-ordination of the curriculum, and that there was extensive communication about the curriculum. On the other hand, a clear majority agreed that teachers consulted with their subject co-ordinators and with other teachers about their teaching.

The issue of co-ordination in these secondary schools appeared to concern the fitting together of different elements rather than co-ordination within those elements.

There were differences between schools in the extent to which teachers saw co-ordination as effective and the frequency of communication. Effective co-ordination was influenced by the frequency of interaction between staff at different levels. The frequency of interaction, as reflected in linkage scores in the present study, was greater in smaller schools. On the basis of these data it would seem that 'other things equal', the smaller the school the more extensive were pattern of communication and teacher perceptions of the strength of co-ordination. The evidence concerning school type is more difficult to interpret, but given the nature of the types of school it might suggest that the existence of strong subject departments could in some ways impede the effective overall co-ordination of the program, if there are not other forms of co-ordination. Exploration of those other ways of linking the work of subject departments through both qualitative studies and more fine grained quantitative analyses should be high on the research agenda. For example, there was a suggestion in the data that the linkage score might be separated into two components; one involving communication with management and the year level co-ordinator about curriculum matters, and the other involving the subject co-ordinator and other teachers. It is possible that the aspect of linkage which contributes most to perceived co-ordination could be the former of these. Further study of this possible relationship is still required.

In general it appeared that perceived co-ordination of the school program influenced teacher satisfaction with the organizational environment. The more effective the co-ordination, the higher was the level of this component of teacher job satisfaction. Even though the issue of which is cause and which is effect may be debated, the association between these two aspects of schooling has been established in these data. On theoretical grounds argued in Chapter 2 it seems most appropriate to view the direction as being that implied by the statement above. In the present study co-ordination measures were based on a scale which asked about issues related to curriculum and teaching: it did not refer to administrative or management issues. Co-ordination was related to school type and linkage between staff and through linkage, to school size and type. School size had a transmitted influence on teacher job satisfaction with the organizational environment through co-ordination, and a direct influence on satisfaction with work load. The direction of both influence was such that teachers in smaller schools recorded higher levels of satisfaction.

Teacher satisfaction with students was not influenced by either of the school level influences, co-ordination and linkage, but was influenced directly by the type of school and the social background of the student population. Teachers in technical schools were less satisfied with students than were teachers in high schools. Such a result could reflect differences in the nature of the students attending each type of school or

differences in the views that teachers hold of their students, or both. An allowance was made for the effect of the social background of students but students could differ in ways other than this.

Teacher job satisfaction should not be discussed as an ephemeral issue of little consequence for educational outcomes. Levels of teacher satisfaction have long term consequences for the operation of the education system. The analyses presented in this chapter identified low levels of satisfaction with the opportunities for useful in-service education and with the provision of useful advice about teaching problems. These are issues to which policy initiatives could be directed. Moreoever, the analyses of differences in teacher satisfaction between schools suggested that extensive communication and effective co-ordination in relation to curriculum policy were associated with higher levels of teacher satisfaction. That is an issue which could be addressed by schools themselves.

CHAPTER 7

STUDENTS' QUALITY OF SCHOOL LIFE

Chapter 1 drew attention to the fact that the experience provided in government secondary schools occupied a significant component of the life of a large segment of the population. It was argued, after Jencks et al. (1972), that such experience deserved consideration in its own right as well as in terms of immediate and long term outcomes. The present chapter addresses the issue of the quality of students' school lives.

Student perceptions of the quality of their school life were measured with the ACER Quality of School Life Questionnaire (Williams and Batten, 1981) which was described in Chapters 2 and 3. In brief, that instrument consisted of 40 statements prefaced by the stem 'my school is a place where ...'. Students were asked to indicate the extent to which they agreed with those statements on a four point Likert scale. The items were structured to assess students' views of the quality of school life in a general positive sense (positive affect), a general negative sense (negative affect), and in five specific domains (teachers, opportunity, achievement, status, and identity). These domains and the corresponding subscales were described in Chapters 2 and 3. Analyses conducted as part of the present study and described in Appendix 1 confirmed the structure of the questionnaire.

The Pattern of Student Responses

Overall summary statistics for the student quality of school life responses have been shown in Table 7.1. For each item, the mean on a four point response scale has been shown (the higher the mean rating the greater the level of satisfaction with the item) together with the percentage of students who 'definitely agreed' or 'mostly agreed' with the statement. The results presented in Table 7.1 were based on a weighted analysis so that they reflected the views of the population of Victorian government secondary school students. An analysis based on school means would have given a slightly different pattern of results since schools were not of equal size.

The most general dimension of the quality of school life was that designated positive affect. On average across the five items representing that domain some two thirds of students agreed that those statements described their school. Four students out of five agreed that their school was a 'place where they liked learning' and three quarters agreed that they felt 'proud to be a student' at their school. On the other hand, only half agreed that their school was 'a place where they liked to go each day', and only 60 per cent agreed that 'learning was a lot of fun'. Whether those results are interpreted as satisfactory or not depends on whether attention is focused on the fact that a majority

Table 7.1 Quality of School Life Summary Statistics: All Year Levels, Fifty School Study[a] 1984

My School is A Place Where	Mean	Per cent agreement
Postive Affect Items (Av. mean = 2.72, % agree = 67.0)		
I like learning	3.04	82.0
I get enjoyment from being there	2.70	65.1
I really like to go each day	2.42	51.0
I feel proud to be a student	2.91	76.7
I find that learning is a lot of fun	2.62	60.3
Negative Affect Items (Av. mean = 1.96, % agree = 24.1)		
I feel depressed	2.03	25.7
I feel restless	2.18	32.1
I feel worried	1.99	25.6
I feel lonely	1.64	12.7
I get upset	1.97	24.3
Teachers Items (Av. mean = 2.90, % agree = 76.6)		
teachers help me to do my best	3.00	78.2
teachers give me the marks I deserve	3.03	81.1
teachers listen to what I say	2.77	70.1
teachers are fair and just	2.79	73.3
teachers take a personal interest in helping me ...	2.76	67.0
teachers treat me fairly in class	3.06	89.8
Status Items (Av. mean = 2.57, % agree = 57.9)		
people look up to me	2.41	47.6
I feel important	2.50	52.6
I know people think a lot of me	2.52	55.1
I feel proud of myself	2.70	64.9
other people care what I think	2.55	58.0
I am treated with respect by other students	2.73	69.5
Identity Items (Av. mean = 3.14, % agree = 86.6)		
I feel it is easy to get to know other people	3.20	87.5
other students are very friendly	3.00	82.4
other students accept me as I am	3.13	86.5
I get on well with the other students in my class	3.29	91.8
I learn to get along with other people	3.19	89.4
mixing with other people helps me to understand myself	3.04	81.9
Opportunity Items (Av. mean = 3.10, % agree = 80.9)		
the things I am taught are worthwhile learning	3.02	80.4
the things I learn are important to me	3.31	90.6
the work I do is good preparation for my future	3.10	80.6
the things I learn will help me in my adult life	3.21	85.5
I am given the chance to do work that really interests me	2.73	64.1
I have acquired skills that will be of use to me ...	3.23	84.6
Achievement Items (Av. mean = 3.03, % agree = 82.4)		
I know I can do well enough to be successful	3.25	90.3
I really get involved in my school work	2.89	77.3
I know how to cope with the work	3.06	85.6
I have learnt to work hard	3.01	78.3
I always achieve a satisfactory standard in my work	3.13	86.2
I am a success as a student	2.87	76.4

[a] Based on weighted responses of 8464 students from 53 schools across all year levels.

agreed with the statements or on the fact that a significant minority disagreed with some statements. This report does not canvass the criteria which might provide the basis for such a judgement. Rather it seeks to explore factors which might influence differences in student responses.

On average one quarter of the students agreed with the negative affect items. Of these items the highest level of agreement was recorded for the item 'my school is a place where I feel restless' and the least agreement was recorded for 'my school is a place where I feel lonely'. Once again there is not a clear criterion for deciding what is an acceptable level of agreement for these items, although many would no doubt feel that one quarter of students agreeing with these items is too high.

Of the specific domains the highest levels of satisfaction were found in the identity items (e.g. 'my school is a place where I learn to get along with other people'). Typically nearly 87 per cent of students agreed with these statements. The lowest levels of satisfaction were found in the status items (e.g. 'my school is a place where other people care what I think') with an average agreement rate of 58 per cent was recorded. Fewer than half the students saw their school as a place where people looked up to them and only a little more than half saw their school as a place where they felt important. Items from the other specific domains recorded an average agreement rate between these two extremes.

On average, a little over four students in every five agreed with the statements from the opportunity and achievement domains. From the opportunity items, the lowest agreement rate was 64 per cent for the statement 'my school is a place where I am given the chance to do work that really interests me' and the highest agreement rate was 91 per cent for the statement 'my school is a place where the things I learn are important to me'. On achievement, the lowest rating was 76 per cent for the item 'my school is a place where I am a success as a student' and the highest was 90 per cent agreement with the item 'my school is a place where I know I can do well enough to be successful'.

Items concerned with relations with teachers attracted agreement from about three quarters of students. The lowest agreement rating was 67 per cent and referred to the statement 'my school is a place where teachers take a personal interest in helping me with my school work'. The highest level of agreement on the 'teachers' items was the 90 per cent recorded for the statement 'my school is a place where teachers treat me fairly in class'. It is interesting by way of speculation to link the idea contained in the 'lowest agreement' item in this domain (personal interest) with the second lowest (... teachers listen to what I say) and the generally low levels of agreement recorded on the status items. A plausible interpretation could be that the pattern of response reflects a lack of sufficient personal recognition of students within the schools being studied.

Quality of School Life and Student Characteristics

As outlined in Chapter 2 the study envisaged an examination of the influence of four student characteristics on the quality of school life. These four characteristics were socioeconomic background, ethnic background, sex, and year level. The analyses of the influence of these factors were conducted to allow for the possibility that these factors could influence student views of the quality of school life simultaneously or interactively. Results presented are of two forms. One form is of the 'other things equal' type in which the effect presented is that which remains after allowing for the influence of the other characteristics. A second form is the unadjusted form which makes no allowance for the simulatenous influence of other variables on the quality of school life.

An Overview

Initially a series of analyses of variance were conducted, each with one of seven quality of school life subscales as the dependent variables. The independent variables were sex, ethnic background (coded in seven categories according to father's country of birth) and year level. Socioeconomic status, as reflected by father's occupation, was included as a covariate. The analyses of variance indicated which effects were statistically significant, and the corresponding multiple classification analysis indicated the net effect size. For the covariate, an indication of effect size was provided by the unadjusted regression coefficient. For the other variables effect size was represented overall for each variable by the beta coefficient (though this is not an exact estimate), and for each category within the variable by the adjusted deviation from the grand mean. The advantage of this form of analysis was that it allowed for non-linear effects and provided measures of effect size for non linear relationships.

Results of the analyses are shown in Table 7.2. None of the interaction terms was statistically significant and so they have not been recorded in the table. The table records effect sizes as defined in the paragraph above. Those effects which were statistically significant on the basis of an F-test, after adjusting for clustering in the sample design (see Appendix 1), have been underlined. From these results it can be seen that the most general influence on the quality of school life scores was the student's year level. Year level was an influence on quality of school life for five of the seven subscales with only status and identity being unrelated to that characteristic. Sex was a significant influence on two of the subscales; positive affect and identity. Ethnic background was also related to two of the quality of school life subscales; positive affect and status. Socioeconomic background was not related to any of the quality of school life subscales.

Table 7.2 Adjusted Net Effective Size Estimate for Various Influences on Student Quality of School Life Scale Scores[abc]

	Quality of school life scale scores				
	Co-variate	Main effects			
Scale	SES[d]	Ethnicity[e]	Sex[f]	Year[g]	Multiple correlation coefficient
Postive affect	-.01	.14	.08	.19	.24
Teachers	.10	.06	.03	.13	.16
Status	-.03	.11	.03	.06	.13
Opportunity	-.02	.06	.04	.24	.25
Identity	-.04	.06	.12	.06	.15
Achievement	.03	.07	.00	.22	.23
Negative affect	-.04	.07	.03	.21	.23

a Effect size estimate is the raw regression coefficient for the co-variate and the beta coefficient for the independent variables.

b Net effect significant at the five per cent level after correction for the design effects in the sample have been underlined. No interaction terms were statistically significant. Design effect factors have been tabulated in Appendix 1.

c N = 8464 cases.

d Based on the six point ANU scale of fathers' occupation (Broom et al., 1975).

e Coded in seven categories according to fathers' country of birth: Australia, other English speaking, Northern Europe, Southern Europe, Eastern Europe, Asia and other.

f Males have been coded as 1 and females have been coded as 2.

g Coded as six categories from Year 7 to Year 12.

Year Level

Of all the student characteristics included in the present study, the most pervasive in its effect on the student quality of school life was year level. Mean subscale scores for each year level have been recorded in Table 7.3, with adjusted deviations from the grand mean being shown in Table 7.4. There is little difference in the pattern of the two sets of results. The variation in subscale scores across year levels has been shown diagrammatically in Figure 7.1. Four patterns were evident in the results observed:

1. Mean scores on two of the subscales, status and identity, showed no significant difference across the year levels.

2. On the two scales designated as positive affect and teacher-student relationships, 'U-shaped' curves were observed with mean scores declining through the middle years before rising again by Year 12 (where there is a more selected population). Positive affect scores reached a minimum in Years 9 and 10 before rising through Year 11 to Year 12 but not regaining the level recorded for Year 7. Teacher-student relations scores declined from Year 7 through Year 8, flattened at a minimum value over Years 9, 10, and 11, before rising to a maximum in Year 12.

Table 7.3 Quality of School Life Scores by Year Level[a]

Year level	Positive affect	Teach.	Status	Opport.	Identity	Achieve.	Negative affect
7	14.7	17.9	13.0	20.0	19.1	16.0	9.3
8	14.1	17.4	12.8	19.3	19.0	15.8	9.2
9	13.1	16.7	12.4	18.4	18.9	15.4	9.4
10	13.3	17.1	12.5	18.3	18.7	15.2	9.7
11	13.2	17.4	12.7	18.0	18.8	14.8	10.3
12	13.8	18.1	12.9	17.5	18.7	14.6	10.9
F Ratio	50.8**	27.0*	7.7	92.3**	3.9	63.7**	64.1**
eta^2	.031	.017	.005	.055	.002	.038	.039

[a] Mean scores based on a weighted between student analysis of 8464 students.

** Significant at the one per cent level after allowing for clustering effects in the sample.

* Significant at the five per cent level after allowing for clustering effects in the sample.

3. For the opportunity and achievement subscales there was a steady decline in scores over the six years of secondary schooling from Year 7 to Year 12. The decline was greatest for the opportunity subscale with the difference between the Year 7 mean and the Year 12 mean being approximately two-thirds of a standard deviation. For the achievement subscale the decline was a little over one half of a standard deviation. These scales were the most curriculum related subscales of the quality of school life questionnaire. Opportunity referred to the extent which students perceived what they were learning as being relevant to them and achievement referred to the extent which students felt they were successful in school work.

4. Scores on the negative affect subscale increased from Year 7 to Year 12 indicating that unfavourable attitudes to this aspect of school life were more prevalent in the later years. For this subscale the difference between the means for Year 7 and Year 12 was approximately one half of a standard deviation.

Table 7.3 also contains an indication of the unadjusted effect size for the influence of year level on quality of school life. The statistic provided is 'eta squared' and it indicates the proportion of the variance in the criterion which could be attributable to differences in year level. For opportunity five and one half per cent of the variance was attributable to differences in year level among the students. For achievement and negative effect the figure was just under four per cent, and three per cent of the variance in positive affect was associated with differences in year level. For the other subscales the effect sizes were smaller than these. Clearly factors other than year level influence student's quality of school life, but differences in year level contribute a small

Table 7.4 Variation of Quality of School Life Scale Scores Across Year Levels Expressed as Adjusted Deviations from a Grand Mean

Scale	Grand mean	Adjusted deviation[a] from grand mean						Comment on pattern across year levels[b]
		Year level						
		7	8	9	10	11	12	
Postive affect	13.7	1.0	0.5	-0.6	-0.4	-0.6	0.0	U shaped curve
Teachers	17.5	0.5	0.1	-0.7	-0.3	-0.1	0.6	U shaped curve
Status	12.7	0.2	0.1	-0.2	-0.2	0.0	0.2	No significant variation
Opportunity	18.7	1.4	0.7	-0.2	-0.3	-0.7	-1.1	Steady decline
Idenitity	19.0	0.1	0.3	-0.1	-0.1	-0.1	-0.2	No significant variation
Achievement	15.4	0.8	0.6	0.1	-0.2	-0.5	-0.8	Steady decline
Negative affect	9.7	-0.5	-.07	-0.3	0.0	0.5	1.2	Steady increase (i.e. gets less favourable)

a Results of a Multiple Classification Analysis with the deviation adjusted for socioeconomic background, ethnic background and sex.

b See Figure 7.1.

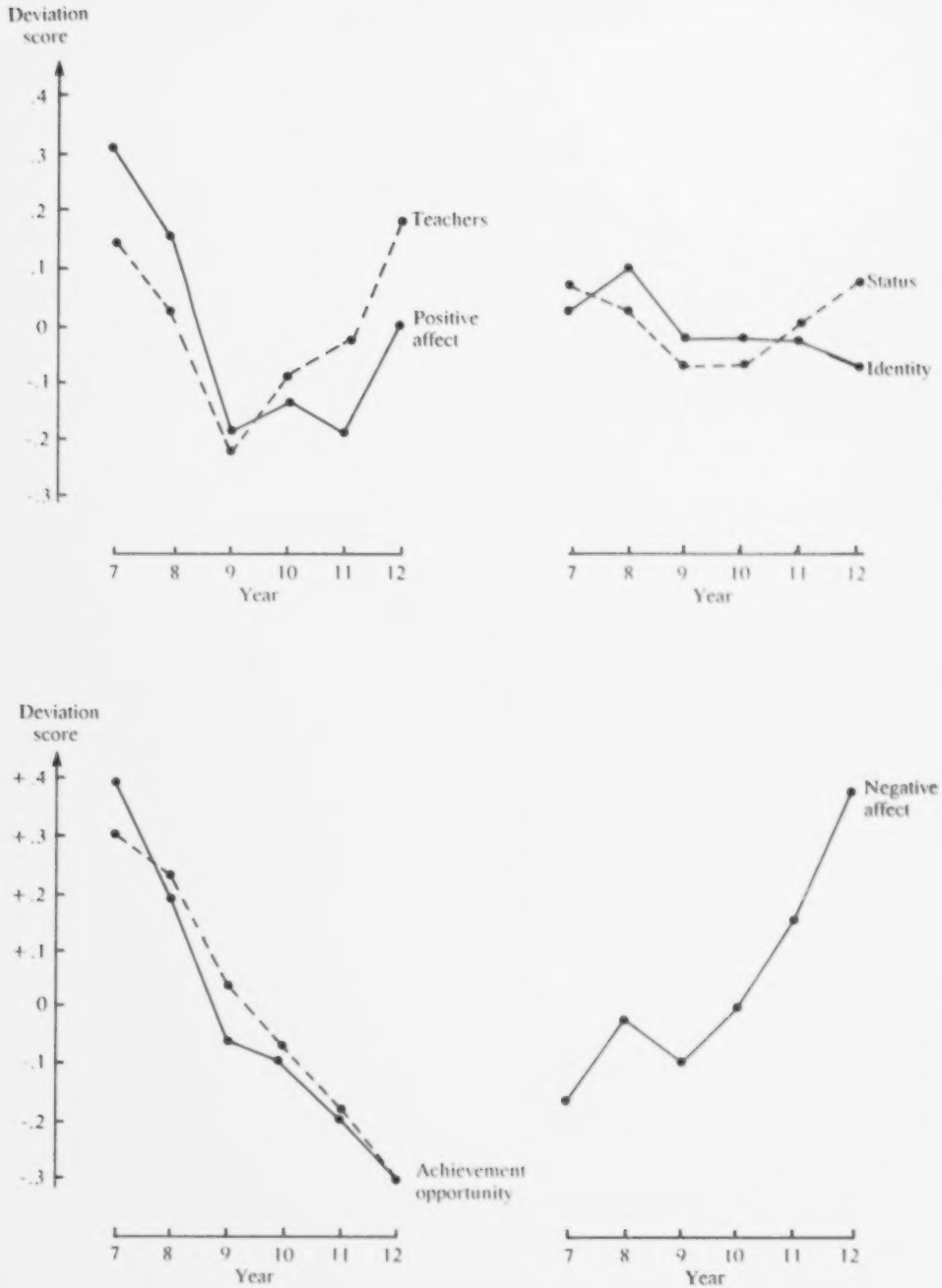

Figure 7.1 Trends in Quality of School Life Scores Across Year Levels

Note: Data are presented as adjusted deviations from the grand mean in standard deviation units.

but significant amount to the variance in some of the subscales. By way of comparison it should be remembered that the relationship between socioeconomic status and achievement of individuals has been based on a range of correlation coefficients for which the median value was 0.22 (White, 1980), a figure which corresponds to about five per cent of the variance.

An unresolved issue remains in that the decline in the opportunity and achievement subscale scores over year levels could be due to older students becoming more critical or to the curriculum not being so suitable for the diversified interests which they have developed. However, it can be observed that there was not a steady decline in scores on other subscales. For identity and status there was no change over year levels and for positive affect and 'teachers', the minimum levels were recorded for the middle rather than the senior school years. If students were simply becoming more critical as they progressed through school one might expect a similar pattern of decline for each subscale. It could therefore be suggested that at least part of the decline in the scores on the two curriculum-related subscales might to attributable to the curriculum becoming less appropriate as students' aptitudes became more differentiated.

Ethnic Background

In the results presented in Table 7.2 it was observed that ethnic background had a statistically significant net influence (other things being equal) on two quality of school life subscales; positive affect and status. Table 7.5 contains the mean scores on each subscale for seven categories of ethnic background and Table 7.6 contains the deviations from the grand mean after adjustment for socioeconomic background, sex, and year level. On the most general of the subscales, positive affect (e.g. 'my school is a place where I get enjoyment from being there'), students whose fathers originated from southern, or eastern, Europe or Asia rated their school more favourably than did students whose father was from Australia, another English speaking country, or northern Europe. The result is consistent with the interpretation of other research presented in Chapter 2.

On the status subscale (e.g. 'my school is a place where I know people think a lot of me'), it was those whose father originated in a southern European country who rated their school experience more highly than did other students. Over all groups the differences on the status subscale were statistically significant at the five per cent significance level. On the other subscales, between-group differences were not statistically significant overall. On these remaining subscales, except for negative affect, the trend was for students of southern European background to rate school life more favourably than students of an Australian or other English speaking background. Students of an Asian background responded in similar manner to those of a southern or eastern European background except on the identity scale (e.g. 'my school is a place other students accept me as I am'). On all the positively oriented subscales the tendency

Table 7.5 Mean Quality of School Life Scale Scores Across Ethnic Groups

Scale	Aust.	Other English speaking	Northern Europe	Southern Europe	Eastern Europe	Asian	Other	F ratio[a]
Postive affect	13.5	13.4	13.2	14.3	14.0	15.2	14.2	25.5
Teachers	17.4	17.5	17.2	17.4	17.6	18.1	18.5	3.8
Status	12.6	12.5	12.2	13.3	12.9	12.8	13.4	14.4
Opportunity	18.6	18.6	18.2	18.6	18.6	19.1	18.9	2.3
Identity	18.8	18.8	18.6	19.2	18.9	18.5	19.0	5.1
Achievement	15.4	15.2	15.0	15.4	15.5	15.6	16.0	3.3
Negative affect	9.6	9.8	9.4	10.1	10.0	10.5	9.7	11.0

[a] F ratio values underlined indicate a significant between group difference at the five percent level, after an allowance has been made for design effects. The critical value for an adjusted F ratio is be 2.1.

Table 7.6 Variation of Quality of School Life Scale Scores Across Ethnic Groups Expressed as Adjusted Deviations from a Grand Mean

Scale	Aust.	Eng.	Northern Europe	Southern Europe	Eastern Europe	Asian	Other	Grand mean
Postive affect*	-.21	-.31	-.49	.65	.39	1.48	0.72	13.7
Teachers	-.02	-.02	-.37	-.10	.26	.61	1.46	17.5
Status*	-.11	-.18	-.48	.61	.05	.12	.98	12.7
Opportunity	-.08	-.04	-.36	.25	.03	.70	.52	18.7
Identity	-.07	-.06	-.27	.38	.19	-.25	.24	19.0
Achievement	-.02	-.26	-.33	.21	.16	.30	.78	15.4
Negative affect	-.12	.13	-.32	.27	.22	.51	-.34	9.7
Number of cases	3769	749	322	988	339	254	60	

* Denotes significant difference at the five percent level across the ethnic groups designated, after allowance for other factors and adjustment for design effects.

was for students of a northern European background to rate school life less favourably than other students.

Negative affect scores (e.g. my school is a place where I feel worried) showed a different pattern of relations with ethnic background to the subscale scores discussed above. Even though in the between group differences were not statistically significant after allowing for other influences, the F ratio was significant when no such adjustment was made. Negative affect scores of students of southern or eastern European background were a little higher than those of other students. For this subscale a higher score suggests a less favourable rating of the school experience; a result which tends to be in accord with popular views. At this point it is not possible to explain this finding but the result does appear worthy of further investigation since it refers to a different aspect of school life and shows a different trend to the other components of the quality of school life.

Sex of Student

There were two subscales on which there were net significant associations with sex. On both the positive affect (e.g. 'my school is a place where I get enjoyment from being there') and identity subscales (e.g. 'my school is a place where I feel it is easy to get to know other people') females rated school life more favourably than did males. The differences between males and females on positive affect and identity were clearly statistically significant but corresponded to an effect size of less than half a standard deviation. Observed differences on these subscales would be consistent with the view noted in Chapter 2 that females tend to emphasize connectedness in networks of relationships and that males tend to emphasize individuation. Mean scores and adjusted deviations from the grand mean for each subscale are shown in Table 7.7.

For teacher-student relations there was a tendency, which did not quite reach statistical signifigance, for females to rate this aspect of the quality of school life more highly than males. On the other hand females also tended to record higher ratings on the negative affect scale than males, a result which corresponds to a less favourable view of that aspect of school. There was also a tendency for females to rate opportunity less favourably than males.

Socioeconomic Background

None of the subscale scores was significantly associated with the socioeconomic background of students (see Table 7.2).

Table 7.7 Mean Quality of School Life Scores by Sex

	Mean score		F[a]	Adjusted deviations[b]	
	Male	Female	ratio	Male	Female
Postive affect	13.4	14.0	66.0	-.26	.23
Teachers	17.2	17.6	20.5[c]	-.12	.11
Status	12.7	12.7	0.9	.08	-.07
Opportunity	18.7	18.5	10.3	.13	-.12
Identity	18.5	19.2	115.3	-.36	.33
Achievement	15.3	15.3	0.4	.00	-.00
Negative affect	9.6	9.9	13.9[c]	-.11	.10

a F ratio values indicate whether the difference between groups is statistically significant. Values underlined are significant at the five per cent level after allowance for design effects in the sample. The critical value if no adjustment was made would be 3.8.

b Figures shown are adjusted deviations from the grand mean after allowing for the effects of socioeconomic status, ethnic background, and Year level.

c Difference just fails to reach significance after allowing for design effects in the sample.

School Organizational Features and Quality of School Life

In this section the influence of two organizational features of schools on students' quality of school life are examined. The first is a background characteristic, the type of school, and the second is a school organizational feature which was of interest to the study, the existence of vertical grouping in the middle school years.

Type of School

The main interest in this section of the study concerned the differences between high schools and technical schools. For each year level on each of the seven quality of school life scales, scores by students from high schools were compared with those from technical schools. Mean scores have been recorded in Table 7.8. There were a few differences in the perceptions of the quality of school life scores recorded by students in high and technical schools. Students from high schools scored more highly on the identity subscale (statistically significant in Years 7 to 10) and on several year levels recorded higher scores on the positive affect subscale (Years 7, 8 and 10). However these differences could have been associated with a greater percentage of females and students of non-English-speaking background in high as opposed to technical schools. There was a tendency for students from technical school to score more highly on the opportunity subscale (which referred to the relevance of the curriculum to the student) than high school students but the difference was statistically significant only at Year 10. In general there was no clear pattern of difference between high schools and technical

Table 7.8 Quality of School Life Scores by Type of School: Between Student Analysis[a]

		Positive affect	Teacher	Status	Opportunity	Identity	Achievement	Negative affect
Year 7	High	14.8	18.0	13.0	19.9	19.2*	16.1	9.2
	Technical	14.2	17.5	12.8	20.1	18.4	15.7	9.7
Year 8	High	14.3*	17.6*	12.8	19.2	19.2*	15.9*	9.1
	Technical	13.4	16.8	12.6	19.5	18.5	15.5	9.5
Year 9	High	13.3	16.8	12.4	18.2*	19.0	15.4	9.5
	Technical	12.8	16.5	12.4	19.0	18.4	15.2	9.2
Year 10	High	13.6*	17.4	12.7*	18.2	18.9*	15.2	9.6
	Technical	12.5	16.4	12.1	18.5	18.1	15.0	9.8
Year 11	High	13.4*	17.5	12.7	17.9	18.8	14.9	10.4
	Technical	12.5	17.0	12.6	18.1	18.5	14.6	9.9
Year 12	High	13.8	18.1	12.9	17.4	18.7	14.6	11.0*
	Technical	13.6	18.3	13.0	18.9	18.6	14.6	9.4

[a] Based on a weighted between student analysis.

* Difference significant at the five per cent level after allowing for clustering in the sample.

schools in the quality of school life response of the students, despite the differences in orientation of the schoools and the differences in aspects of school co-ordination and teacher satisfaction noted previously in this chapter. Differences between high schools and technical schools are examined further as part of a between-school multivariate analysis in a later section of the chapter.

Vertical Grouping

In Table 7.9 results have been reported comparing the responses of students from schools with some vertical grouping with those from schools with no vertical grouping. Overall there was little difference between views of the quality of school life held by students in vertically grouped structures and their peers in more traditional horizontal year level structures. However, within this general pattern the youngest year level (Year 8) there was a suggestion that in terms of identity and status those in the year level grouping may have been a little more favourably inclined but the difference was very small.

Curriculum at Year 12

Most of the Year 12 students in the fifty school study were enrolled in high schools with relatively few being in technical schools. High school students were enrolled in four types of program: a course consisting of VISE Group 1 subjects, a course which combined VISE Group 1 and Group 2 subjects, a course consisting of VISE Group 2 subjects, and an approved Group 2 study structure. Students from Year 12 in technical schools were enrolled in either the Technical Year 12 program or a set of VISE Group 2 subjects. In practice some students from one school combined VISE Group 2 subjects with school-developed (not accredited) subjects. For the analyses in these sections, these students have been classified with those undertaking a set of VISE Group 2 subjects. There were no students from the Tertiary Orientation Program who responded to the survey.

In all courses there would have been some attrition over the year but the level of attrition was greater for the Technical Year 12 program. That program sets out to help students find employment over the course of the year, so that the extent that students leave the course for that purpose is a measure of its success in that area. When interpreting the results of the present study, it needs to be remembered that the data were based on those students who remained at school in October 1984.

An Overview

In Table 7.10 mean subscale scores for students in six types of Year 12 course have been recorded. The results in that table have been based on weighted data but there were only a few minor differences from the unweighted analysis. The responses for VISE

Table 7.9 Quality of School Life Scores by Vertical Grouping: Between Student Analysis[a]

	Year 8		Year 9		Year 10		Year 11	
	Vert. group	Not vert. group	Vert. group	Not vert. group	Vert. group	Not vert. group	Vert. group	Not vert. group
Positive affect	13.6	14.0	13.4	13.3	13.4	13.3	13.0	13.2
Teachers	17.1	17.4	17.4	16.9	17.0	17.3	17.0	17.4
Status	12.1	12.7	12.5	12.6	12.6	12.5	12.7	12.7
Opportunity	18.8	19.3	18.2	18.7	18.2	18.3	17.9	18.0
Identity	18.5	18.9	18.8	18.8	18.6	18.7	18.3	18.9
Achievement	15.4	15.7	15.3	15.6	15.1	15.1	14.8	14.9
Negative affect	9.3	9.2	9.6	9.5	9.9	9.6	10.2	10.2
N	314	1350	443	1073	696	799	473	772

[a] Based on an unweighted analysis for reasons outlined in Chapter 3.

Table 7.10 Quality of School Life Scores for Year 12 Students in Different Courses

Subscale	Course type: High schools: VISE Group 1	VISE Group 1 and 2	VISE Group 2 only	VISE Group 2 Study structures	Technical schools: T12	VISE Group 2
Positive affect	13.8	13.1	13.7	14.9	13.4	14.4
Teachers	18.2	16.8	17.3	18.5	18.1	19.2
Status	12.9	12.4	13.8	13.6	12.6	15.0
Opportunity	17.3	17.1	18.1	19.2	18.6	20.4
Identity	18.7	18.7	18.1	18.9	18.5	19.1
Achievement	14.6	14.1	14.3	15.4	14.5	15.0
Negative affect	11.0	11.5	11.2	10.1	9.3	9.7
N (unweighted)[b]	1006	136	16	104	40	13

a Mean scores based on the weighted analysis have been recorded.
b Based on average valid responses across each subscale.

Group 2 subjects in technical schools have been classified separately from the same course in high schools because the pattern of response was different and because of the inclusion of other subjects in some of the technical schools operating VISE Group 2 subjects. On an initial inspection, it appeared that the differences across course types were greatest on the opportunity scale (which referred to the relevance of the curriculum to the student), and on that subscale differences were greatest between the courses developed as an alternative to VISE Group 1 subjects and the traditional Group 1 courses. Other differences were evident in the negative affect scale (which referred to feeling lonely or depressed at school) in which lower scores were recorded in the alternative courses in high schools than for the traditional courses, and lower scores again were recorded in the technical school courses at Year 12. To examine these patterns more closely high schools were examined separately from technical schools.

High Schools

From Table 7.10 it appeared that among high school students at Year 12 the trend on most subscales was in the direction of more favourable views being reported by students who indicated that they were enrolled in an Approved Study Structure. This tendency was noticed for four subscales: postive affect, opportunity, achievement and negative affect. In order to explore these tendencies more fully two additional analyses were conducted of the high school students responses to the quality of school life questionnaire. First the subscale scores of those undertaking an Approved Study Structure were grouped with those undertaking a set of Group 2 subjects. This grouping represented an alternative course of study to the traditional course. Similarly, those undertaking either Group 1 subjects only or a mixture of Group 1 and Group 2 subjects were bracketed to represent a more traditional course of study. Mean scores on each of the subscales for the alternative and traditional courses have been shown in Table 7.11. Second, a specific comparison was made between students from an Approved Study Structure and those in a traditional course based on Group 1 subjects or a mixture of Group 1 and 2 subjects. Results of these analyses have been recorded in Table 7.12.

When scores for students in alternative courses were compared with those in traditional courses the direction of differences tended to favour the alternative course (see Table 7.11). However, for only one of the subscales was the difference statistically significant after correcting for design effects. That subscale was opportunity. On the basis of these results it appears that students in the alternative courses rated their school life as more relevant than did their peers in traditional courses. The magnitude of the difference was about half of a standard deviation. Differences which would have been considered statistically significant, had no correction for design effect been made, were observed for the negative affect, positive affect, status and achievement subscales. The direction of the trends in these subscales was to show more positive attitudes for the students from the alternative courses.

Table 7.11 Quality of School Life Scores for High School Students in 'Traditional' and 'Alternative' Year 12 Courses

Subscale	Course mean[a]		F ratio[b]
	Traditional[c]	Alternative[d]	
Positive affect	13.7	14.7	11.3
Teachers	18.0	18.4	1.6
Status	12.8	13.6	7.4
Opportunity	17.3	19.1	24.7
Identity	18.7	18.9	0.3
Achievement	14.6	15.3	7.6
Negative affect	11.1	10.3	6.2

a Means recorded from the weighted analysis. There were only trivial differences on two subscales between the weighted and unweighted analyses.

b Values underlined indicated a statistically significant difference at the five per cent level after adjusting for design effect factors. Values greater than 3.8 would be considered significant if no adjustment was made for design effects.

c VISE Group 1 or a mixture of VISE Group 1 and Group 2 subjects.

d VISE Group 2 Approved Study Structures or VISE Group 2 subjects alone.

The comparison between the Approved Study Structure and the traditional course recorded in Table 7.12 showed a similar pattern of results to those discussed above. In this set of analyses statistically significant differences between the two types of course were noted on both the curriculum related subscales: opportunity and achievement. On these subscales students from Approved Study Structures related their school life more favourably than their peers in traditional courses. On the negative affect, positive affect, and status subscales smaller, but not statistically significant, tendencies in the same direction were noted.

Overall it appeared that among Year 12 students in high schools the alternative forms of study at Year 12 were regarded more highly in terms of relevance and no less highly with respect to other aspects of the quality of school life. On four other subscales there was a tendency towards high scores among students in alternative forms of study. Significant differences between the Approved Study Structure and traditional courses were found on the opportunity and achievement subscales.

Technical Schools

On the opportunity subscale, students in technical schools recorded similar ratings to the high school students in an Approved Study Structure. Of the students in technical schools those in the Technical Year 12 recorded a slightly lower mean score than those undertaking VISE Group 2 subjects. Since the sample of technical school students in Year 12 was small, it was possible for the results from one school to influence the overall pattern substantially. The high mean scores from technical school students doing

Table 7.12 Quality of School Life Scores for Year 12 High School Students in Approved Study Structures and Traditional Courses

Subscale	Course mean[a]		F ratio[b]
	Traditional	Approved study structure	
Positive affect	13.7	14.9	12.9
Teachers	18.0	18.5	2.5
Status	12.8	13.6	6.3
Opportunity	17.3	19.2	25.5
Identity	18.7	18.9	0.6
Achievement	14.6	15.4	9.2
Negative affect	11.1	10.1	7.4

a Means recorded from the weighted analysis. There were only trivial differences on two subscales between the weighted and unweighted analyses.

b Values underlined indicated a statistically significant difference at the five per cent level after adjusting for design effect factors. Values greater than 3.8 would be considered significant if no adjustment was made for design effects.

VISE Group 2 subjects were partly attributable to the favourable ratings recorded by students from a country technical school in the sample. That school offered a wide range of VISE Group 2 subjects which were supplemented by some school developed subjects related to local industry. In fact, some students at that school described their course as a school developed course rather than a set of VISE Group 2 subjects. Students from technical schools undertaking that type of course structure also recorded relatively high mean ratings on the status scale and the 'teachers' scale. Those high ratings were also in part the influence of the particular school noted above.

Students from Year 12 in technical schools recorded lower scores on the negative affect subscale than did high school students. Across the six types of Year 12 courses noted in Table 7.10, it appeared that students in the two technical school courses rated this aspect of school most favourably, followed by the students from the two 'alternative' courses in high schools, and then followed by the two 'traditional' courses in high schools.

In Summary

In Table 7.13 results have been recorded for a general comparison of students in 'alternative' and 'traditional' year 12 courses across all secondary schools in the sample. 'Alternative' refers to an Approved Study Structure, a Technical Year 12, or a set of VISE Group 2 subjects, while 'traditional' refers to VISE Group 1 subjects either alone or mixed with VISE Group 2 subjects (such a mix would normally contain only one or two Group 2 subjects). The examination of the quality of school life among students in different Year 12 courses revealed the strongest effects on the opportunity subscale. This subscale refers to students viewing the work they do at school as relevant to them

Table 7.13 Quality of School Life Scores for all Year 12 Students in Traditional and Alternative Courses

Subscale	Course type[a]		F ratio[b]
	Traditional[c]	Alternative[d]	
Positive affect	13.7	14.3	4.6
Teachers	18.0	18.4	2.2
Status	12.8	13.3	5.4
Opportunity	17.3	19.0	38.9
Identity	18.7	18.7	0.0
Achievement	14.6	15.0	4.3
Negative affect	11.1	9.9	23.3
N (weighted)	1142	173	

a Means recorded from the weighted analysis. There were only trivial differences on two subscales between the weighted and unweighted analyses.

b Values underlined indicated a statistically significant difference at the five per cent level after adjusting for design effect factors. Values greater than 3.8 would be considered significant if no adjustment was made for design effects.

c Traditional includes VISE Group 1 subjects only or a mix of VISE Group 1 and 2 subjects.

d Alternative includes VISE Group 2 subjects only, a VISE Group 2 Approved Study Structure, or a Technical Year 12.

and is typified by items such as 'my school is a place where the things I am taught are worthwhile learning' and 'my school is a place where I am given the chance to do work that really interests me'. Ratings of that subscale were highest in VISE 2 subjects in technical schools, the Approved Study Structure in high schools, and the Technical Year 12 course. All these courses embodied the notion of broadening the content and form of Year 12 so that the Year 12 curriculum was more closely geared to the aptitudes of the students. Students from the alternative courses also recorded more favourable attitudes, in the form of lower scores, on the negative affect subscale than did students from the traditional courses. There was also a tendency (which was not statistically significant after allowing for design effects in the sample) for students from the three courses designated as alternative to rate a number of other aspects of the quality of school life a little more highly than was the case in the traditional Year 12 courses.

School Level Influences on the Quality of School Life

The previous sections of the present chapter have examined the relationship between students' quality of school life and characteristics of students, their type of school, the form of student grouping and, among Year 12 students, the type of curriculum in which they were enrolled. It found the quality of school life was influenced by the student's year level and some other characteristics, and that some aspects of the quality of school life were influenced by type of school and the form of curriculum at Year 12.

This section examines whether the school-level influences concerned with 'linkage' and 'co-ordination' influenced quality of school life as perceived by students. It was found that the correlations between the quality of school life subscales for a school and the measures of teacher job satisfaction were low. Hence the analysis of influences on the quality of school life was treated independently of the analysis of teacher job satisfaction.

It was expected that the strongest influence of school organizational factors of the type discussed in Chapter 6 would be on the positive affect subscale. The positive affect subscale refers to general satisfaction with school and would be expected to reflect the influence of general organizational features of schools. In contrast subscales such as opportunity might be expected to reflect more the influence of the type of curriculum being studied than the general organizational features of the school. The positive affect subscale also corresponds in content to more general measures of satisfaction with school such as the 'like school' scale used in IEA studies (Comber and Keeves, 1973). Results were expected, therefore, to be more comparable with other studies of students' attitudes to school. Hence most of the discussion in this section refers to the positive affect subscale although results have been presented and discussed for all the subscales of the quality of school life questionnaire.

The Analysis

A mixed level analysis was undertaken in which the unit of analysis was the student, but in which school level variables were incorporated by assigning to the student the value for the school. The sample of students was weighted for the analysis and results of the weighted analyses have been reported. There were no differences between the weighted and unweighted analyses, and there were no differences according to whether community schools were included or excluded.

The purpose of the analysis was to determine whether the inclusion of the variables representing school level influences had a significant effect on the quality of school life after allowing for the effect of student characteristics and school background characteristics. Regression analysis was the method used. The student characteristics considered were year level sex, ethnic background (coded as a dichotomous variable with Australian or other English speaking as 0 and non-English-speaking background as 1), and socioeconomic background. School background characteristics were the size of school and the type of school. To each student was assigned the school mean score derived from the teacher survey for linkage (a composite measure of structural coupling), and effectiveness of co-ordination (derived as an average scale score from the teacher survey).

Results from the set of regression analyses of the quality of school life subscales have been recorded in Table 7.14. The data recorded are the standardized regression

Table 7.14 Regression Analysis of Quality of School Life Scores on Student and School Influences (Standardized Regression Coefficients)

Independent variables	Positive affect	Teachers	Status	Opport.	Ident.	Achieve.	Negative affect	Linkage
Linkage	.14	.09	.10	.08	.08	.05	-.05	
School type[a]	-.11	-.09	-.07	.02	-.09	-.06	.02	.35
School size[b]	.03	.00	.02	.02	.05	.03	-.03	-.47
Sex[c]	.07	.03	-.02	-.02	.10	.00	.04	.02
Ethnic background[d]	.10	.01	.06	.03	.01	.03	.04	.00
S.E.S.[e]	.02	.04	.00	.02	-.02	.05	-.04	.02
Year level[f]: Year 8	-.07	-.05	-.03	-.08	.00	-.03	-.02	.00
Year 9	-.17	-.12	-.07	-.17	-.02	-.09	.01	.02
Year 10	-.16	-.07	-.06	-.18	-.04	-.13	.04	.00
Year 11	-.17	-.05	-.04	-.21	-.03	-.17	.11	.00
Year 12	-.12	.01	-.01	-.25	-.05	-.21	.18	-.04
Multiple R	.26	.17	.13	.25	.16	.21	.21	.62

a School type coded as 1 for high schools and 2 for technical schools.
b School size is the total enrolment in July 1984.
c Sex coded as 1 for males and 2 for females.
d Ethnic background coded as 0 and for Australian or other English-speaking background and 1 for non-English-speaking background.
e Measured from fathers occupation coded on the six-point ANU scale.
f Captured as a set of dummy variables relative to Year 7.

Note: Coefficients significant at the five per cent level (after adjusting for design effect) have been underlined. Results based on a sample of 8464 students.

coefficients. The magnitude of these coefficients provides an indication of the strength of the association between the independent and dependent variables, and the sign of the coefficient indicates the direction of the association. Effect sizes estimated in this way provide an 'other things equal' estimate, after statistical allowance has been made for the confounding influence of other variables in the analysis. Those coefficients which were statistically significant have been underlined.

One set of results in Table 7.14 refers to linkage as a dependent variable. Those results were consistent with the between-schools analysis reported in Chapter 6. Linkage was higher in small schools than large schools and in technical schools than high schools.

Positive Affect

From the results presented in Table 7.14, it can be observed that the influence of student background characteristics (year level, sex, and ethnic background) were consistent with the results reported earlier in this chapter. In other words positive affect was higher in Year 7 than in Years 9 to 11, was higher among those of a non-English-speaking background than those of an English-speaking background, and among girls compared with boys. In addition, the pattern previously observed of students from high schools scoring slightly higher than their peers from technical schools at some Year levels remained after controlling for differences in student background characteristics. However the net effect of school type on positive affect was small. The direct effect, noted in Table 7.14, was partly compensated by a transmitted effect in which technical schools recorded higher linkage scores than high schools and higher linkage was related to positive affect. There was no direct influence of size of school on positive affect, and no effect of socioeconomic background on positive affect.

There was observed a significant, although small, effect of 'linkage' among staff on positive affect for students. Where linkage was greater (i.e. more extensive communication among staff and with co-ordinators) students' positive affect was higher. This supports the hypothesis advanced in Chapter 2. However, it is interesting that a similar analysis incorporating perceived co-ordination rather than linkage as a mediating variable showed no association between co-ordination and positive affect. It appeared that the objective measure of frequency of communication was more strongly related to positive affect among students than the more subjective impression of co-ordination in relation to the curriculum.

The indirect path between school size and positive affect corresponded to an overall path coefficient of 0.07. The small overall effect of school size on positive affect appeared to arise from the effect of school size on linkage within schools which was then transmitted to this student attitude. Consequently these data were consistent with the management theory interpretation of the affects of school size on students

(Gottfredson, 1985) rather than the manning theory interpretation (Barker and Gump, 1964). As outlined in Chapter 2 the management theory of school size postulates that in larger schools management becomes more cumbersome and that this influences students' attitudes to school. Manning theory argues that school size influences students' attitudes because in smaller schools there are more opportunities for students to be engaged in a range of school activities.

Other Aspects of the Quality of School Life

Table 7.14 also contains results for the other subscales of the quality of school life questionnaire. In terms of student background characteristics the results presented are consistent with those outlined in a previous section of this chapter. Females recorded higher scores on the identity subscale than did males, and students of non-English-speaking family background recorded higher scores on the status subscale than did their peers of an English-speaking background. On this 'other things equal' analysis there was a small barely significant association between socioeconomic status and scores on the achievement subscale, but there was no general association between quality of school life and student's socioeconomic background.

There was little difference between high schools and technical schools on any of the subscales. On the four subscales where a significant direct path coefficient was observed, which might have suggested lower scores in technical schools, there was a partly compensating indirect effect operating through the higher linkage scores in technical schools.

For all the subscales other than negative affect there was a statistically significant association between linkage and quality of school life. On each of the subscales - status, teacher-student relations, opportunity, and identity - the direction of influence was for higher linkage scores to be associated with enhanced quality of school life. The size of the coefficient for the achievement subscale was very small and only barely reached the level required for statistical significance.

In Summary

There was an association between linkage and scores on the positive affect scale, which was taken to be a measure of general satisfaction with school. The direction was such that higher linkage was associated with greater satisfaction with school among students. This result confirmed the postulate argued in Chapter 2. Similar but smaller influences of linkage were observed for other subscales of the quality of school life questionnaire. It could be concluded from this that there was benefit to students from extensive communication within schools. Moreover the results reported above suggest that the influence of school size on student attitudes was small and transmitted through linkage rather than direct. On that basis it would seem that even in large schools it might be

possible to implement procedures which avoid cumbersome administration and minimize deleterious effects of size on student attitudes to school.

Influences on the Quality of School Life

In this chapter a number of influences on students' quality of school life were identified. Some of these influences related to the social origins of students, and possibly arose from factors outside of school, whereas others involved school factors more directly.

Positive affect, or general satisfaction with school, and identity, were higher among females than males. Positive affect and status were higher among those students whose fathers were of a non-English-speaking background, particularly those of a southern European or Asian background. These results cannot be dismissed as indicating a generally compliant response pattern since the effects were not observed across all the subscales. The results are consistent with observations of retention and participation rates in post-compulsory schooling (Ainley et al, 1984a, 1984b; Williams and Clancy, 1985) and can be best interpreted in terms of aspirations held for, and by, those groups with regard to education.

Differences across year levels were noted in five of the seven quality of school life subscales. Of particular interest was the decline in student satisfaction expressed on the two subscales which were most directly curriculum related: opportunity and achievement. The decline in the opportunity subscale was the most marked, and reflected a sense that the curriculum became less relevant to students in later years. This occurred despite the fact that Victorian government secondary schools retained less than half of a cohort through to Year 12. Moreover, the pattern of decline in relevance did not match that of general satisfaction with school (positive affect) or teacher-student relations, which fell from Year 7 through the middle years before rising again in Year 12. Support for the interpretation that the decline in curriculum relevance perceived by students was not simply a reflection of students becoming more critical as they grew older came from the comparison of students in 'alternative' Year 12 courses with those in 'traditional' courses. Students in the alternative courses which had been designed to engage students' interest in issues of concern to them and their future, recorded higher scores on the opportunity scale than other students. Those various alternative courses embodied many similar principles, which could possibly guide the revision of programs at Year 12 on a wider basis.

Finally there was evidence that aspects of the way schools functioned influenced general satisfaction with school, as reflected in the positive affect subscale. Where communication between staff was more frequent, students reported greater satisfaction with school. Given that communication was more extensive in small schools than large, there was a transmitted influence of school size on positive affect, but the main effect resulted from the extent of linkage rather than from school size directly.

CHAPTER 8

SCHOOL ORGANIZATION AND THE QUALITY OF SCHOOLING

This study of Victorian government secondary schools was intended to serve two main functions. The first was to describe patterns of organization in government secondary schools throughout Victoria. The second was to explore relationships between aspects of school organization and the quality of school life in those schools. Although the first of these purposes was of mainly of interest to Victorians, the second raised issues of more wide-ranging interest in the general field of school organization and its effects. The theoretical framework which guided the exploration of these relationships was derived from that organizational theory and hopefully the results of the study will contribute to its development as well as informing policy debate within Victoria.

Descriptions of the School System

At the beginning of the report it was argued that the move towards devolution of authority to the school level might have been expected to increase the range of school policy and practice. A report such as this cannot adequately answer the question of whether the variation in policy and practice is greater now than once was the case, or whether the extent of variation has altered as a consequence of the formal devolution of authority to schools.

From the general description of school organizational and curriculum features presented in Chapter 5 the impression was that most schools were organized in a similar general pattern, but with some interesting variations among a minority of schools. The general pattern which has become accepted as traditional in secondary schools, was for teaching in year level groups in subject areas to extend over one year. At Year 7 and 8 the program was most commonly described as one type of course based on a series of separate subjects, in Years 9 and 10 the most common description was that the program was a compulsory core and a series of electives (though the scope for options at this level was small), and in Years 11 and 12 programs were generally described as based on elective subjects or units (typically with about three times as many subjects being available in a school as any student was required to study). As students progressed through the schools they studied a smaller number of subjects but had a greater choice.

At Year 12, a little less than half the high schools offered only VISE Group 1 subjects, with a similar number of schools offering a mixture of VISE Group 1 and Group 2 subjects or Approved Study Structures. Those which offered a mix typically offered about 15 Group 1 subjects and two to three Group 2 subjects from which to constitute a full course of study, or an approved study structure. More than half of the technical

schools offered a course of study at Year 12, although this took various forms. This represents a considerable change from just a few years ago when most technical schools finished at the end of Year 11.

One variation from the traditional form of organization which was noted was the use of vertical grouping of students in the middle years. Typically this form of organization operated over Years 8, 9, and 10, although in a few schools Year 11 was involved. The grouping arrangements were usually linked to curriculum arrangements under which students studied units lasting for one term or one semester rather than subjects extending over a year. Students' courses were structured around units and they were in teaching groups which could include students from more than one year level. Schools which operated these systems had various ways of structuring the sequence of units included in a course through rules about prerequisites and course selection and through individual guidance. Provision of adequate guidance in course design for individual students appeared to be a critical issue for this form of organization. Within the general form of organization called vertical grouping there was some variation. For example, in one of the schools visited there were semester-length units while the other based its system on term-length units. Over three years, students at the first school would study fewer units but each of longer duration than those studied by students at the second school. The first specified graduations in the standard of the units while the second had more rules governing selection of units. A student in each of the schools would study a greater number of different units over a full year, but fewer units simultaneously, than a student in a typical subject-based system.

The study indicated that it is not appropriate to describe decision making in schools as centralized or decentralized without specifying the topic about which the decision is concerned. In general decisions about broad curriculum policies were taken centrally, although staff participated on a collegial basis, instructional matters were decided at a subject department or individual teacher level (although there was considerable variation about where decisions were made regarding internal assessment policy, and homework policy), and administrative decisions were made either centrally or in a subject department. From the information provided about where decisions were made, and from information about frequency of communication between various staff, it appeared that the subject department remained a very important subunit within secondary schools, and especially within technical schools. A majority of teachers (71 per cent) were satisfied with their involvement in decisions about school policy, and nearly all were satisfied with their freedom to select teaching methods. However, fewer than half agreed that curriculum co-ordination within their schools was sufficient or extensive. The questions of how various decision-making structures in secondary schools relate to each other, and the ways in which school activities are co-ordinated, remain important for further research. The extent to which co-ordination is necessary probably reflects the way in

which the school curriculum is viewed and what is seen as the purpose of secondary schooling.

School Organization and the Quality of School Life

Different parts of the report examined postulated relationships between school and student background characteristics, school level influences, and some aspects of the quality of school life. The extent to which teachers regarded the school curriculum as effectively co-ordinated was influenced by the frequency of interaction between staff. The frequency of interaction among staff as measured in the present study was, in turn, greater in smaller schools than larger schools. Technical schools reported more frequent communication than high schools (mainly concerned with student welfare and directed to the subject co-ordinator) but less effective co-ordination of the curriculum. No simple interpretation of this is obvious although it does seem consistent in a general sense with the view that the presence of strong subject departments can limit the extent of co-ordination across different components of the curriculum, unless other co-ordinating structures also exist. A recent review of high schools in the Australian Capital Territory arrived at a conclusion similar to this using different types of data and in a different context (ACT Schools Authority, 1983).

The extent of co-ordination of the school curriculum, as measured in the present study, influenced teacher job satisfaction with the organizational environment. The more effective was the co-ordination of the curriculum, the higher were the levels of job satisfaction in this area. In other words, in schools where teachers saw curriculum as being cohesive job satisfaction in this domain was higher.

It is worth noting that two items on which teachers expressed low levels of satisfaction concerned the opportunities for useful in-service education and the availability of advice about problems in teaching. The first of these relates to the system as a whole but the second is probably connected to the organization within schools.

Teacher job satisfaction with students, and with the work load, were not found to be influenced by school level organizational factors. Satisfaction with students was related to the social composition of the school and the type of school. Satisfaction with work load was influenced by school size. The smaller the school, other things equal, the higher the satisfaction expressed by teachers with their work load.

Students' quality of school life was related to characteristics of the students themselves and some to school-level factors. Of the student characteristics influencing quality of school life the most pervasive was year level. In two of the domains, identity and status, there was no significant variation from Year 7 to Year 12. Student responses in terms of positive affect and teacher-student relations followed a U-shaped curve:

there was a decline from Year 7 through the middle years followed by a rise to Year 12. In the three remaining areas of the quality of school life - opportunity (a sense that school work is relevant), achievement (feeling successful), and negative affect (loneliness, depression) - students' views became progressively less favourable from Year 7 to Year 12. Opportunity and achievement are the two dimensions of the quality of school life questionnaire most related to the curriculum. The pattern from the opportunity subscale suggested that in general students find the curriculum less relevant to their interests in the later years of secondary school than in the early years. In addition, according to the results on the achievement scale they feel less successful in the later years. The increase in negative affect scores through the year levels is less easy to interpret.

Girls rated the quality of their school life higher than boys in two domains. On the most general of the subscales, positive affect, girls scores were slightly higher than boys indicating greater general satisfaction with school among girls than boys. In addition girls rated the quality of school life higher than boys in the area of identity or social integration. The differences were small but statistically significant and are consistent with the view that different aspects of relationships are valued by males and females (Gilligan, 1982).

There were differences among students of different ethnic background on the positive affect, status, and (to some extent) negative affect subscales. In terms of positive affect and status, students whose fathers were born in Southern Europe or Asia rated school life more highly than other students. The results for positive affect and status could have reflected a high value being placed on schooling by those communities. The results for negative affect were not so unequivocal in the statistical analysis but appeared to show a different pattern. The results for negative affect could have reflected problems faced by some students of non-English-speaking background in not feeling part of a dominant social culture.

The school factors considered as potential influences on the quality of school life included major organizational features of schools and more specific details of the curriculum and management of the schools. There were no major and consistent differences between technical and high schools which could not be attributable to differences in the nature of the populations of those schools. There were no differences in quality of school life scores among students in the middle years of secondary school according to whether their school operated vertical grouping or traditional year level arrangements. It was in the more detailed aspects of school organization that there was found some influences on quality of school life.

At Year 12 there were differences between students in different types of course on the opportunity scale. Students in some types of courses at Year 12, which were designated as alternatives to the traditional courses, rated the opportunity or relevance

aspects of school life more highly than students in traditional courses. These alternative courses, though different from each other in some ways, embodied similar principles through which an explicit attempt was made to match the course content and method to the aptitudes of the students. In addition high school students in an Approved Study Structure rated school life more highly in terms of achievement (in other words students tended to feel more successful) than students in traditional high school Year 12 courses based on Group 1 or a mix of Group 1 and Group 2 subjects. Among technical school Year 12 students the ratings of school life were more favourable in terms of negative affect. Such results are probably best interpreted as indicating the need for a range of programs at Year 12 which recognize the diverse aptitudes and interests of potential students rather than as evidence of any one type of course being the best.

The other area in which a school influence on quality of school life was detected concerned the relationship between the extent to which staff communicated with each other about curriculum and student welfare issues (designated as linkage in the study) and students' positive affect. When allowance was made for the influence of other characteristics of students and their schools, there was a small net influence of linkage on positive affect. In other words when the level of communication among staff was high there was greater general satisfaction with school expressed by the students. It has already been noted that levels of communication were higher in small schools than large, so this results suggested that there may be some benefits to students through the fostering of positive attitudes in small schools. However it should be noted that the overall effect size would be small since the influence operated in an indirect way through the linkage among staff.

In general the study found that patterns of school organization do influence the quality of school life for teachers and students in small but significant ways. For teachers satisfaction with the organizational environment was enhanced when they perceived the curriculum to be co-ordinated, and when levels of communication between staff were high. Students found the quality of school life was higher when the curriculum recognized their diverse aptitudes and when levels of communication between their teachers were high.

REFERENCES

Ainley, J. Six Hundred Schools. (ACER Research Monograph No.17). Hawthorn, Vic.: ACER, 1982.

Ainley, J. Administrative environment and school structures. In Educational Research for National Development: Policy, Planning and Politics. Collected Papers of the Annual Conference of the Australian Association for Research in Education, Canberra: CCAE, 1983.

Ainley, J. Administrative environment and school structures. In Australian Association for Research in Education. Educational Research for National Development: Policy, Planning and politics. Collected Papers for the 1983 Conference, Canberra, 1983.

Ainley J., Batten, M. and Miller, H. Staying at High School in Victoria. (ACER Research Monograph No.23). Hawthorn, Vic.: ACER, 1984a.

Ainley, J. Batten, M. and Miller, H. Patterns of Retention in Australian Government Schools. (ACER Research Monograph No.27) Hawthorn, Vic.: ACER, 1984b.

Austin, A.G. Australian Education 1988-1900. Melbourne: Pitman, 1961.

Australian Capital Territory Schools Authority. The Committee to Review Education in A.C.T. Government High Schools (Chairperson J. Steinle). The Challenge of Change: A Review of High Schools in the A.C.T. Canberra: Canberra Publishing and Printing, 1983.

Barker, R.G. and Gump, P.V. Big School, Small School. Stanford, Calif.: Stanford University Press, 1964.

Bassett, G.W. Australian education. In R.K. Browne and D.J. Magin. Sociology of Education: A Source Book of Australian Studies. Melbourne, Vic.: McMillan, 1976.

Batten, M. Issues of the Eighties: Principals' Perspectives and School Practices. (ACER Research Monograph No.22). Hawthorn, Vic.: ACER, 1983.

Batten, M. and Girling-Butcher, S. Perceptions of the Quality of School Life: A Case Study of Schools and Students. (ACER Research Monograph No.13). Hawthorn, Vic.: ACER, 1981.

Benson, J. The bureacratic nature of schools and teacher job satisfaction. The Journal of Educational Administration, 1983, 21(2), 137-48.

Beswick, D., Hayden, M., and Schofield, H. Evaluation of the Tertiary Education Assistance Scheme: An Investigation and Review of Policy on Student Financial Assistance in Australia. (Studies of Tertiary Student Finances Vol.4). Canberra: AGPS, 1983.

Bourke, S.F. The Teaching and Learning of Mathematics. (ACER Research Monograph No.25). Hawthorn, Vic.: ACER, 1984.

Bridges, E.M., and Hallinan, M.T. Subunit size, work system interdependence and employee absenteeism. Educational Administration Quarterly, 1978, 14, 22-24.

Broom, L., Duncan-Jones, P., Lancaster Jones, F., and McDonnell, P. Investigating Social Mobility. Canberra: ANU Press, 1977.

Butts, R.F., Assumptions Underlying Australian Education. Hawthorn, Vic.: ACER, 1955.

Campbell, W.J., Cotterell, J.L., Robinson, N.M. and Sadler, D.R. Effects of School Size upon Some Aspects of Personality. Brisbane: University of Queensland, 1979.

Clarke, D.L. et al. Effective schools and school improvement: a comparative analysis of two lines of inquiry. Educational Administration Quarterly, 1984, 20 (3), 41-68.

Comber, L.C. and Keeves, J.P. Science Education in Nineteen Countries. Stockholm and New York: John Wiley and Son, 1973.

Conant, J.B. The American High School Today. New York: McGraw-Hill, 1959.

Connell, R.W., Ashenden, D., Kessler, S. and Dowsett, G. Making the Difference. Sydney: Allen and Univin, 1982.

Deschamp, P. and McGaw, B. Responsibility for curriculum evaluation in centralized systems. Australian Journal of Education, 1979, 23, 209-26.

Dow, G. Curricular reform that were 'caught and taught' in Australia. Journal of Curriculum Studies, 1985, 17(2), 215-26.

Edmonds, R., The research on effective schools. In Puckert, M.L. and Hupport, E. (eds). Effective Schools: A Report on a Conference of School Effectiveness. San Francisco: San Francisco Education Fund, 1984.

Epstein, J.L. The Quality of School Life, Lexington, Mass.: D.C. Heath, 1981.

Firestone, W.A. and Herriott, R.E. Do Elementary Prescriptions Fit Secondary Schools? Philadelphia, Perm.: Research for Better Schools, 1982. (ED 223 761)

Firestone, W.A. and Wilson, B.L. Using Bureacratic and Cultural Linkages to Improve Instruction: The High School Principals Contribution. Eugene, Oregon: Centre for Educational Policy and Management, 1983. (ED 242 049).

Fitzgerald, R.T. Emerging issues in the seventies. Quarterly Review of Australian Education, 1972, 5(3), 1-47.

Fordham, A.M. The Context of Teaching and Learning. Hawthorn, Vic.: ACER, 1981. (mimeo.)

Gilligan, C. In a Different Voice. Cambridge, Mass.: Harvard University Press, 1982.

Gottfredson, D. School Size and School Disorder. Baltimore, Maryland: Centre for Social Organization of Schools, Johns Hopkins University, (Report No.360), 1985.

Guba, E.G. and Lincoln, Y.S., Effective Evaluation, San Francisco, Calif.: Jossey Bass, 1981.

Handy, C. Taken for Granted? Understanding Schools as Organizations. (Schools Council Program 1: Purpose and Planning in Schools). London: Longman, 1982.

Herriott, R.E. and Firestone, W.A. The Bureacratic Elementary School: Comparing Two Images of Elementary, Junior High and High Schools. Philadelphia, Perm.: Research for Better Schools, 1981 (ED 203 532).

Hirschi, T. Causes of Delinquency. Berkeley, Calif.: University of California Press, 1969.

Holdaway, E.A. Facet and overall satisfaction of teachers. Educational Administration Quarterly, 1978, 14, 30-48.

Hoy, W.K. New Measures of Structural Coupling. A working paper, Rutgers University, New York, 1979.

Isherwood, G.B. and Hoy, W.K. Bureacracy, powerlessness, and teacher work values. The Journal of Eduational Administration, 1973, 11(1), 124-38.

Jackson, R.W. Emergent Needs in Australian Education. Hawthorn, Vic.: ACER, 1962.

Jencks, C., Smith, M., Acland, H., Bane, M., Cohen, D. and Gintes, H., Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Basic Books, 1972.

Kandel, I.L. Types of Administration. Melbourne: Melbourne University Press, 1938.

Keeves, J.P. Educational Environment and Student Achievement. Stockholm: Almqvist and Wiksell, 1972.

Light R.J. and Pillemer D.M., Numbers and narrative: Combining their strength in research reviews. Evaluation Studies Review Annual, 1983, 8, 33-58.

Lindsay, P. The effect of high school size on student participation, satisfaction and attendance. Educational Evaluation and Policy Analyses, 1982, 4(1), 57-65.

Lindsay, P. High school size, participation in activities, and young adult social participation: Some enduring effects of schooling. Educational Evaluation and Policy Analysis, 1984, 6(1), 73-83.

Lipham, J.M. Improving the decision-making skills of the Principal. In Culbertson, J.A. and others (eds), Performance Objectives for School Principals. Berkeley, Calif.: McCutcheon, 1974.

Mazarella, J.A. The Effective High School Principal: Sketches for a Portrait. (R and D Perspectives), Eugene, Oregon: Centre for Educational Policy and Management, University of Oregon, 1985.

Metz, M.H. Classrooms and Corridors. Berkeley, Calif.: University of California Press, 1978.

Meyer, M.W. (Ed.). Environments and Organization. San Francisco: Jossey Bass, 1978.

Meyer, J.W. and Cohen, E. The impact of the open space schools upon teacher influence and autonomy: The effects of an innovation. (Technical Report No.21). Stanford, Calif.: Stanford Centre for Research and Development in Teaching, 1971.

Miskel, C.G., Bloom, S., and McDonald, D. A Study to Establish the Reliability and Validity of Estimates for Three Measures of Structural Coupling. Paper presented at the annual meeting of The American Educational Research Association, (ED 013 371) 1981.

Miskel, C. and McDonald, M. Structural Coupling in Schools. Paper presented at the annual meeting of the American Educational Research Association, 1982.

Mitchell, D. and Spady, W. Organizational contexts for implementing outcome based education. Educational Researcher, 1978, 7(7), 9-17.

McKenzie, P. and Keeves, J. Eight Education Systems. (ACER Research Monograph No.16). Hawthorn, Vic.: ACER, 1982.

Mohrmamm, A.M., Cooke, R.A., and Mohrmamm, S.A. Participation in decision making: multidimensional perspective. Educational Administration Quarterly, 1978, 14, 13-29.

McPartland, J.M. and McDill, E.L. (Eds). Violence in Schools. Lexington, Mass.: Lexington Books, 1977.

Musgrave, P.W. Knowledge Curriculum and Change. Melbourne: Melbourne University Press, 1973.

Purkey, S.C. and Degen, S. Beyond Effective Schools to Good Schools: Some First Steps. (R and D Perspectives). Eugene, Oregon: Centre for Educational Policy and Management, University of Oregon, 1985.

Ratsoy, E.W. Participative and hierachical management of schools: Some emerging generalizations. The Journal of Educational Administration, 1973, 11, 161-70.

Reed, R.A. Curriculum reform in Victorian secondary schools in the late sixties. In Murray-Smith, S. (Ed.), Melbourne Studies in Education 1975. Melbourne: Melbourne University Press, 1976.

Ross, K.R. Sample design for educational survey research. Evaluation in Education: International Progress, 1978, 2(2), 106-95.

Skidmore, R.H. School Size: The Continuing Question. Brisbane: Education Department, 1981.

Sturman, A. Patterns of School Organization: Resources and Responses in Sixteen Schools. (ACER Research Monograph No.18). Hawthorn, Vic.: ACER, 1982.

Taft, R. The aspirations of secondary school children of migrant families in Victoria. Education News, 1975, 15(1), 38-41.

Victoria. Minister of Education. School Councils. (Ministerial Paper No.4). Melbourne: Government Printer, 1983.

Victoria. Ministerial Review of Postcompulsory Schooling (Chairperson J. Blackburn). Discussion Paper. Melbourne: Ministerial Review of Postcompulsory Schooling, 1984.

Victoria. Ministerial Review of Postcompulsory Schooling (Chairperson J. Blackburn). Report. Melbourne: Ministerial Review of Postcompulsory Schooling, 1985.

White, K. Socioeconomic status and academic achievement. Evaluation in Education: An International Review Series, 1980, 4, 79-81.

Williams, T. and Batten, M. The Quality of School Life. (ACER Research Monograph No.12). Hawthorn, Vic.: ACER, 1981.

Williams, T. and Clancy, J. The Full Twelve Years. Hawthorn, Vic.: ACER, 1986 (forthcoming).

APPENDIX 1

SOME TECHNICAL NOTES

Sampling and Administration

The Initial Survey
Samples of Schools for the Fifty School Study
Samples of Students
Samples of Teachers
Administration

The Quality of School Life Questionnaire

A Rationale for the Questionnaire
The Internal Structure of the Questionnaire
Statistical Properties
Design Effect Factors

The Teacher Questionnaire

Rationale
Measures of Structural Coupling
Aggregated Measures of Structural Coupling
Perceived Co-ordination
Teacher Job Satisfaction

References to Appendix 1

SOME TECHNICAL NOTES

This appendix is intended to provide supplementary technical detail on the conduct of the study beyond the information contained in Chapter 3 of the report. In various parts of the report reference has been made to technical aspects of the analyses which it would not have been appropriate to include in the main section of the report. The appendix reports on three main aspects of the study; sampling, the school life questionnaire and the teacher questionnaire.

Sampling and Administration

The Initial Survey

The initial survey of all secondary schools was conducted in July 1984. It provided most of the quantitative information contained in Chapter 4, and the basis for stratification in the sample design for the fifty school study.

Two forms of a questionnaire were used in the 1984 survey of secondary schools. One form was sent to High Schools and one form was sent to Technical Schools. For the purpose of analysis and presentation of data the schools were classfied High Schools (which in addition to High Schools included High Technical Schools, Higher Elementary Schools, Consolidated Schools, and Central Schools), Technical Schools, Technical High Schools, Community Schools and newly formed Post-Primary Schools. In this study a practice used by the Education Department was followed in grouping High Technical Schools with High Schools and Technical High Schools as a subset of Technical Schools (even though the Year 12 curriculum in those schools was often like that of a High School).

Most of the questionnaire content was common but, in response to an initial reaction, a modified form of the question concerned with the curriculum provided at Year 12, was used for the technical schools surveyed. Overall the questionnaire was concerned with the types of curriculum structure over Years 7 to 12 (with the greatest emphasis being placed on the types of program offered at Year 12), and the organizational arrangements over these six years of schooling.

In total 420 questionnaires were sent to schools. There were actually 418 schools on Education Department lists but one had multiple campuses operating independently and it was decided to treat these as separate schools. Of those sent out 408 questionnaires were returned and coded, representing a response rate of 97 per cent.

Responses were obtained from 292 High Schools, with seven such schools not responding (six of these would have been expected to offer Year 12). Six of the seven Community Schools returned completed questionnaires. Five of these schools normally appeared on Education Department lists as High Schools. There were 100 questionnaires

returned from 103 Technical Schools and all five of the designated Technical High Schools responded. One of these provided two questionnaires: one for each of its separate sites. All but one of the newly created Post Primary Schools replied. In summary the response rate overall, and from each sub-category, was high.

Sample of Schools for the Fifty School Study

Since many of the analyses which were envisaged involved schools as the unit of analyses a stratified random sample of schools were chosen. Stratification does not imply any deviation from the principle of randomness. It simply means that prior to selection the population is divided into a number of strata and then a random sample is selected from each stratum. Stratification was based on type of school (High or Technical), organization in the middle years (vertical grouping or not), and curriculum structure at Year 12. The strata have been specified in Table A.1. Since the effects of different forms of organization in the middle school years was a major interest, and because vertical grouping had been reported in about one fifth of schools, a disproportionate sampling fraction was chosen. A sampling fraction of 0.1 was used for strata 1 to 4 (i.e. no vertical grouping at Year 10) and a sampling fraction of 0.2 was used for strata 5 to 8. These fractions were chosen to given similar precision to estimates concerning each form of organization and result in an overall sample of about 50 schools (that size being determined by budget factors). In practice the sampling process resulted in a sample of 53 schools. Some of the schools selected were replaced because they were committed to another study and some were replaced for other reasons. These have been shown in Table A.1.

Even though it has been shown (Moser and Kalton, 1971:85-117) that stratification results in increased precision over a simple random sample it seemed more appropriate to treat the sample as if it were a simple random sample of 50 schools, since any gain in precision depended on the properties of the variable being considered. Where population estimates were calculated from between school analyses the weighting factors shown in Table A.1 were applied.

Samples of Students

It was important that students from each year level were sampled to provide information across the whole of each school. To ensure stability of estimates it was initially planned to sample about 30 students from each year level. Given a prior knowledge of numbers at each school, schools were asked to include all students at Year 12 and in all schools where the total enrolment at a year level was fewer than 50 students, schools were asked to provide data from all of these students rather than from a sample. In a few other cases schools asked that information be obtained from all the students present at the time of administering the questionnaire. In these cases the total responses were used for

Table A.1 Sampling Details for Survey of Student and Teacher Responses[a]

Stratum number	Stratum description	Popn.	Samp. fract.	No. in sample	Replacements		Weights[d]
					Design[b]	Admin[c]	
1	Technical schools with no Year 12 and no vertical grouping in Year 10.	26	0.10	3	-	1	1.08
2	Technical schools with Year 12 and no vertical grouping in Year 10.	38	0.10	4	-	-	1.18
3	High schools[e] with no Year 12 or VISE 1 only and no vertical grouping in Year 10.	113	0.10	11	-	2	1.27
4	High schools[e] with VISE1 and VISE 2 at Year 12 and no vertical grouping in Year 10.	105	0.10	11	2	1	1.18
5	Technical schools with no Year 12 and vertical grouping in Year 10.	14	0.20	3	-	2	0.58
6	Technical schools with Year 12 and vertical grouping in Year 10.	21	0.20	4	-	-	0.65
7	Secondary schools[e] with no Year 12 or VISE 1 only and vertical grouping in Year 10.	41	0.20	8	-	-	0.63
8	Secondary schools[e] with VISE 1 and VISE 2 at Year 12 and vertical grouping in Year 10.	45	0.20	9	2	1	0.62

a Excluded population was five new post-primary schools with only Year 7 or Year 7 and 9.
b Schools replaced at selection stage because of involvement in another ACER study.
c Schools replaced during administration because of inability to participate.
d Weights calculated to give a weighted sample of 50 schools.
e For sampling purposes includes technical high schools.

Table A.2 Sample Size for the Study[a]

Year level	Number of students	Number of schools	Students per school
7	1469	53	28
8	1506	53	28
9	1398	53	26
10	1388	53	26
11	1318	51	26
12	1385	43	32
Total	8464	53	160

[a] In addition to this sample for the fifty school study, some 2823 students provided information which was used in a series of case studies.

reporting to schools but random samples of 30 at each year level were selected for the survey analyses. Details of the numbers of students included from each year level have been shown in Table A.2. Overall a total of 8464 students were sample from the 53 schools.

In schools where samples were drawn from each year level schools were asked to sample at random from the school list. Details of a systematic procedure for this sampling were provided. Where this sampling across all classes at the year level was not practical, compromise procedures involving intact mixed ability classes were suggested.

For analyses conducted at the student level in Years 7 to 11 weighting factors at each year level based on the enrolment at that level and the sample size at the year level were calculated. The application of these weights at each year level, for each school, in the between student analyses resulted each school contributing in proportion to its size.

At Year 12 the sampling design included all students from that level who were available. Differences between the designed and the achieved sample arose mainly from attrition during the course of the year. This attrition was greater in the Technical Year 12 program than in other courses. In practice both weighted and unweighted analyses were performed for Year 12 though it is mainly the results from the weighted analyses which have been reported. In practice the differences between weighted and unweighted analyses were small.

Samples of Teachers

All teachers in the 53 schools were invited to participate in the study by completing the teacher questionnaire. In practice replies were received from 1646 teachers representing a response rate of approximately 65 per cent.

Administration

The surveys to students and teachers were administered through schools in early October though in about eight schools personal visits were made to schools to conduct the survey. The schools selected were approached by letter (from the Education Department) in early September with an invitation to participate. That letter included copies of the questionnaire. Telephone contact was then made to determine acceptance. At this point each school was able to indicate whether it wished to administer the questionnaire or whether it preferred the project team to attend the school and administer the student questionnaire in person. This choice was in practice only feasible for metropolitan schools. At the beginning of October the schools which agreed to participate were sent a letter outlining procedures for administration of the survey, and (where the school was to conduct the survey) the required number of questionnaires and reply paid postage bags.

As part of the instructions for administration schools were provided with details regarding the procedures for sampling students. Typical sampling instructions were as follows:

> Sampling. In drawing a sample of 25 to 30 students at each year level from Year 7 to 11 our preference would be for you to draw those samples at random from your lists. A suitable procedure for doing this would be as follows:
>
> | | | | |
> |---|---|---|---|
> | (i) | At Year 7 choose the ... | and then every ... | student |
> | (ii) | At Year 8 choose the ... | and then every ... | student |
> | (iii) | At Year 9 choose the ... | and then every ... | student |
> | (iv) | At Year 10 choose the ... | and then every ... | student |
> | (v) | At Year 11 choose the ... | and they every ... | student |
>
> At Year 12 all students would be given the Student Questionnaire to complete. We appreciate that this procedure (which we designate as Alternative A) may be difficult to arrange and therefore present the following three additional alternatives if you feel it is necessary to use one of them.
>
> Alternative B: Choose 8 and 10 students at random from each of three (mixed ability) class groups at each year level from Year 7 to Year 11.
>
> Alternative C: Choose between 12 and 15 students at random from each of two (mixed ability) class groups at each year level from Year 7 to Year 11.
>
> Alternative D: Choose one/two intact mixed ability group(s) from each year level from Year 7 to Year 11 provided that the combined total number does not exceed forty students.
>
> Of course each of these alternatives would also involve all students from Year 12. Could you please advise us of the sampling method chosen when you return the material?
>
> For schools which operate vertical grouping across several year levels the sampling procedure can be varied to take account of that arrangement.

The Quality of School Life Questionnaire

A Rationale for the Questionnaire

The section of the Student Questionnaire entitled School Life contained a 40-item instrument which was the result of work done at the ACER (Williams and Batten, 1981) on the development of a model specifying the dimensions of quality of life within schools from the perspective of students, and the development of a measure from this model in the form of a self-report Likert scale. The model was a direct analogue of the more general 'quality of life' measures found in the literature on social indicators. In its present form it covered three dimensions of school life: Positive Affect, dealing with the positive aspects of life at school (exemplified by items such as 'My school is a place where ... I feel proud to be a student, ... I really like to go'); Negative Affect, dealing with negative aspects of life at school (exemplified by items such as 'My school is a place where ... I feel restless, ... I get upset'); and satisfaction with specific domains of schooling.

The specific domains of school life were defined from first principles by drawing on a theory of schooling that links social-structure and individual systems of action in schools. The five domains were the following.

Achievement:	A sense of confidence in ones ability to be successful in school work ('My school is a place where I am a success as a student')
Opportunity:	A belief in the relevance of schooling ('My school is a place where the things I learn are important to me')
Status:	The relative degree of prestige accorded to the individual by significant others within the school ('My school is a place where I am treated with respect')
Identity:	A sense of learning about other people and getting along with other people ('My school is a place where I learn to get along with other people')
Teachers:	A feeling about the adequacy of the interaction between teachers and students ('My school is a place where teachers are fair and just')

The 40 items which constituted the quality of school life questionnaire are shown in Table A.3. The model on which the instrument was originally based envisaged that these subscales would not be independent of each other, and that more useful information could be obtained from the separate scores on the subscales representing each domain than from a composite overall measure of the quality of school life.

The Internal Structure of the Questionnaire

In considering the properties of the Quality of School Life questionnaire an examination was made of the items and subscales to determine whether the items clustered into

Table A.3 Factor Pattern Matrix of an Oblimin Rotation: Quality of School Life Items

Item	MY SCHOOL IS A PLACE WHERE ...	Factor 1	2	3	4	5	6	7
8	I like learning	63						
9	I get enjoyment from being there	67						
31	I really like to go each day	67						
2	I feel proud to be a student	55						
39	I find that learning is a lot of fun	61						
5	I feel depressed			68				
11	I feel restless			64				
33	I feel worried			76				
19	I feel lonely			59				
24	I get upset			74				
23	teachers help me to do my best				-65			
12	teachers give me the marks I deserve				-60			
40	teachers listen to what I say				-69			
29	teachers are fair and just				-77			
16	teachers take a personal interest in helping me with my school work				-69			
1	teachers treat me fairly in class				-70			
4	people look up to me							-73
28	I feel important							-70
21	I know people think a lot of me							-70
35	I feel proud of myself							-53
15	other people care what I think							-43
17	I am treated with respect by other students		-44					-47
6	I feel it is easy to get to know other people		-67					
10	other students are very friendly		-68					
36	other students accept me as I am		-63					
38	I get on well with the other students in my class		-73					

Table A.3 (continued)

Item	MY SCHOOL IS A PLACE WHERE ...	Factor						
		1	2	3	4	5	6	7
32	I learn to get along with other people		-66					
18	mixing with other people helps me to understand myself		-45					
27	the things I am taught are worthwhile learning					65		
3	the things I learn are important to me					57		
34	the work I do is good preparation for my future					74		
20	the things I learn will help me in my adult life					81		
25	I am given the chance to do work that really interests me					46		
13	I have acquired skills that will be of use to me when I leave school					77		
26	I know I can do well enough to be successful						56	
7	I really get involved in my school work	45					39	
22	I know how to cope with the work						68	
37	I have learnt to work hard						43	
14	I always achieve a satisfactory standard in my work						73	
30	I am a success as a student						68	

Total percentage variance explained = 54.
Seven factors had an eigen value greater than 1 (K = 10.6, 3.0, 2.2, 1.7, 1.5, 1.3, 1.2/0.9).
N = 8464.
Note: Factor loadings less than 0.3 have not been shown and decimal points have been dropped.
Factor 1 = Positive affect
Factor 2 = Identity
Factor 3 = Negative affect
Factor 4 = Teachers
Factor 5 = Opportunity
Factor 6 = Achievement
Factor 7 = Status

Table A.4 Factor Correlation Matrix for Oblimin Rotation

	Factor					
	1	2	3	4	5	6
Factor 2	-17					
Factor 3	-12	22				
Factor 4	-42	25	16			
Factor 5	-40	-20	-16	-39		
Factor 6	30	-18	-22	-31	40	
Factor 7	-23	39	10	-23	-19	-22

Note: Decimal points have been omitted.
Factor 1 = Positive affect
Factor 2 = Identity
Factor 3 = Negative affect
Factor 4 = Teachers
Factor 5 = Opportunity
Factor 6 = Achievement
Factor 7 = Status

subscales consistent with the measurement model which had been proposed. The technique used for checking the patterns of clustering in the data was a form of factor analysis (see Child 1970). For the sample overall with all forty items included the seven principal components with eigen values greater than one were extracted and rotated using an oblique rotation procedure.

Table A.3 records the results of the pattern matrix of that oblique principal component analysis. The factor correlation matrix is shown in Table A.4. Generally the items clustered in a pattern are consistent with the model proposed. Of the forty items only two were identified as loading on different scales to those originally proposed. Item 7 ('My school is a place where I really get involved in the work I do') was intended as a measure of the achievement domain but loaded equally strongly as an indicator of general positive effect. Item 17 ('My school is a place where I am treated with respect') was intended as a measure of status, but in practice was associated equally strongly with those items related to teachers as with the other status items. These two items were dropped from the calculation of subscale scores used in this paper. When the analysis was repeated with Item 7 and Item 17 excluded the factor pattern matrix matched that expected from the model underlying the questionnaire.

In addition to conducting the analysis described above over the full sample it was replicated using the sample of each year level separately. Some items which behaved as expected overall loaded on other subscales at particular year levels. At each year level items 7 and 17 loaded as described above for the general pattern.

Among the younger students, those in Years 7 and 8, two of the opportunity items loaded other factors as well as opportunity. Item 3 ('the things I learn are important to

me') loaded on the positive affect factor as well as on opportunity and Item 25 ('I am given the chance to do work that really interests me') loaded on the achievement factor as well as opportunity. At Year 9 item 25 had a low loading on opportunity, but in Years 10, 11, and 12 all of the opportunity items including items 3 and 25 clustered as expected. It would appear that in the young year levels students did not so clearly distinguish interest from success and importance from general satisfaction, although those distinctions are made by older students.

Among students in Year 9 Item 37 ('I have learnt to work hard') loaded on the positive affect factor as well as on the intended achievement factor. Item 18 had a low loading on its intended identity factor but did not appear to reflect any other factor. For Year 10 students Item 15 ('other people care what I think') which was intended to reflect status also reflected teacher-student relations. It seemed that 'other people' was interpreted as meaning teachers by some of the Year 10 students.

For students in Years 11 and 12, the expected groupings of items were confirmed in the analyses except for two instances. Among Year 11 students Item 15 ('other people care what I think') behaved in the same way as it had done for Year 10 students (i.e. it loaded on teacher student relations as well as status). At Year 12 Item 19 ('I feel lonely') which was intended to reflect negative affect also loaded with the status items.

In general the patterns of items at each year level were consistent with the intended structure of the questionnaire. At each year level all the items loaded on the factor which was intended although in a few cases at particular year levels a second factor was also involved.

Statistical Properties

On the basis of these results, subscales corresponding to the proposed domains were constructed. Subscale scores were calculated in the usual way by summing the score assigned to each item in the group. Each item had been coded as 1 for definitely disagree through to 4 for definitely agree. As noted above items 7 and 17 were excluded from the calculation of subscale scores for achievement and status respectively. These subscales were shown to be reliable (the values of coefficient alpha ranged from 0.75 to 0.84, with a median value of 0.79) and the scores covered an appropriate range of the possible scale. Details are recorded in Table A.5. The subscale scores were correlated with each other as expected and as shown in Table A.6.

Design Effect Factors

In sample designs where students are sampled from within schools the effect of clustering is known to reduce the effective sample size (see Ross, 1978). The sample design for the study was made up of two stages. A sample of schools was selected and within these schools samples of students were selected. When students in each school

Table A.5 Scale Statistics for Quality of School Life Questionnaire

Scale	No. items	Alpha rel.	Mean[a]	SD[a]	Possible range
Positive affect	5	.83	13.7	3.2	5-20
Teachers	6	.83	17.6	3.4	6-24
Status	5	.77	12.7	2.8	5-20
Opportunity	6	.84	18.7	3.5	6-24
Identity	6	.78	18.8	2.9	6-24
Achievement	5	.77	15.4	2.5	5-20
Negative affect	5	.76	9.7	3.0	5-20

[a] Unweighted analysis, N = 8464.

are more similar, with regard to attitudes and achievements, to each other than to students in other schools, the effective sample size is smaller than the apparent sample size. The extent to which clustering decreases the precision which can be obtained from a sample depends on the size of the clusters, and the intraclass correlation coefficient which provides a measure of the degree of similarity within each school.

For the present study the values of the intraclass correlation coefficient were estimated from the results of the series of one-way analysis of variance calculations using school as the independent variable and the subscale scores as the dependent variable. Vales of the intraclass correlation coefficient were then calculated using a formula proposed by Ross (1978:183):

$$R_i = (F-1)/(F+(\bar{n}-1))$$

where R_i is the intraclass correlation coefficient,

F is the F statistic calculated as the between school mean square divided by the within school mean square, and

$\bar{n}$ is the average number of students in each cluster or school.

Table A.6 Correlation Coefficients between Scale Scores

Positive affect	Teachers	Status	Opport.	Ident.	Achieve.	Negative affect
Positive affect	59	49	58	38	54	-28
Teachers		39	53	33	47	-23
Status			38	53	46	-23
Opportunity				32	55	-26
Identity					34	-30
Achievement						-31

[a] Decimal points have been omitted.
Unweighted analysis, N = 8464.

Table A.7 Values of the Intra-Class Correlation Coefficient for Each QSL Subscale at Each Year Level

Subscale	Year level 7	8	9	10	11	12	Mean	Whole school
Positive affect	10	10	08	07	09	10	09	05
Teachers	11	08	07	07	07	09	08	04
Status	09	06	04	03	04	06	05	02
Opportunity	05	07	05	05	07	07	06	03
Identity	06	03	03	06	04	05	05	02
Achievement	04	03	01	03	05	03	03	01
Negative affect	05	04	04	03	05	06	05	02
Mean value	07	06	05	05	06	07	06	03

Table A.7 contains the values of R for each subscale at each year level, and for schools as a whole.

The overall effect of the intraclass correlation coefficient (the extent to which students in the same school are similar) and the size of the clusters (the lumpiness of the sample or the number of students from each primary sampling unit) is summarized in the design effect factor (Deff). Deff was calculated from the formulae (see Ross, 1978):

$$\text{Deff} = 1+(\bar{n}-1)R_i$$

where Deff is the design effect factor,

$\bar{n}$ is the average cluster size, and

R_i is the intraclass correlation coefficient.

From Table A.8 it could be seen that there was some variation in the design effect factor across subscales and across year levels. Generally the extent of clustering was greatest for the positive affect and teachers subscales and least for the achievement subscales. In addition the clustering was greater at Year 7 and Year 12 and less in the middle years. The average values of the design effect factor across year levels and subscales was 2.6.

The design effect factor can be thought of as the value by which the size of a complex sample would need to be divided to yield the size of a simple random sample of equivalent precision (Ross, 1978:137-138). For example a sample of 1500 students taken in groups of 30 from 50 schools would be equivalent to a simple random sample of 577 if the value of Deff was 2.6. In testing the significance of an F-ratio for the difference between means, it is customary to divide the F-ratio by Deff, and then to determine whether the adjusted F ratio exceeds the requirements for statistical significance (see Wilson, 1985). When testing the significance of regression coefficients, or correlation

Table A.8 Values of the Design Effect Factor for Each QSL Subscale at Each Year Level and for Whole Schools

Subscale	Year level 7	8	9	10	11	12	Mean	Whole school
Positive affect	3.8	3.7	3.1	2.8	3.2	4.1	3.5	8.8
Teachers	4.0	3.0	2.7	2.7	2.8	3.7	3.2	6.6
Status	3.4	2.6	2.1	1.8	1.9	3.0	2.6	4.3
Opportunity	2.4	2.8	2.3	2.4	2.9	3.3	2.7	5.3
Identity	2.6	1.9	1.7	2.4	2.1	2.6	2.4	4.3
Achievement	2.2	1.7	1.3	1.8	2.2	2.1	1.9	2.3
Negative affect	2.5	2.2	1.9	1.7	2.2	2.8	2.2	3.9
Mean value	3.0	2.6	2.2	2.2	2.5	3.1	2.6	5.1
Average cluster size	28	28	26	26	26	32	28	160

coefficients the standard errors would be multiplied by the square root of Deff (often referred to as Deft) before applying the usual tests of statistical significance (see Wilson, 1985).

The design effect factors calculated above were applied when estimating significance levels of statistics used with the quality of school life scales.

The Teacher Questionnaire

The questionnaire for teachers provided much of the information about school organization. It was concerned with structural coupling (linkages among staff), teacher perceptions of co-ordination, and teacher job satisfaction. In addition it provided information about such matters as teaching experience, teaching allotment, and organizational responsibilities. Teachers were also invited to indicate where decisions about different topics were made in the school. As indicated in an earlier section of this appendix 1646 teachers from 53 schools replied to the questionnaire, representing a response rate of approximately 65 per cent.

This section of the appendix discusses the ways in which data concerning structural coupling, perceptions of co-ordination, and teacher job satisfaction were obtained.

Rationale

Structural coupling was defined as the mechanisms and norms of interaction among individuals in a system which bind the parts of that system together (Miskel and McDonald, 1982). Sometimes that general concept has been subdivided to separate structural coupling within the operating core of a school (i.e. between teachers) from structural coupling linking the school administration with the operating core (see Miskel and McDonald, 1982). For secondary schools subunits are of greater significance than in

primary schools. Hence this report introduced an additional distinction by considering structural coupling between teachers and the equivalent of 'middle management' (a subject department head or a year level co-ordinator). In addition it invoked some consideration of the subject of the interaction by allowing that there may be different levels of interaction on matters of instruction and student welfare. Consequently the report assumed a multidimensional rather than a unidimensional concept of structural coupling.

The concept of co-ordination was more global and concerned the perception of teachers of the extent of cohesiveness in a domain such as curriculum or discipline (see Hoy, 1979). In this study attention was focused on co-ordination of the curriculum. Even though this approach is often considered to be based on similar notions to structural coupling there are some important differences. A school may be seen as well co-ordinated for reasons other than the frequency of communication. The present study was concerned not only to distinguish structural coupling from overall co-ordination but to explore the relationships between these two aspects of school organization.

The approach to teacher satisfaction was grounded in the work of Holdaway (1978). Holdaway began with a theory of job satisfaction and from the comments of teachers about aspects of their job which made them satisfied or dissatisfied. From that beginning Holdaway developed a notion of general and facet satisfaction of teachers. Subsequent refinements of the Holdaway approach in Australian contexts have suggested that three aspects of teacher satisfaction can be separately identified (Bourke, 1984; Ainley et al., 1984). Those facets of teacher satisfaction refer to satisfaction with the organizational environment of the school, satisfaction with students, and satisfaction with working conditions.

Measures of Structural Coupling

In developing measures of structural coupling two different approaches were adopted. First, information about linkages with other teachers was based on a modified form of a scale concerned with work system interdependence developed by Bridges and Hallinan (1978). Basically it asked teachers to indicate how frequently they engaged in various activities (e.g. jointly plan lessons) with other teachers. Teachers responded by ticking one of a series of seven boxes ranging from every day to once per year and never. A principal components analysis indicated a partial separation between items concerned with planning and items concerned with action so that two correlated scales could be formed. Details of that analysis have been reported in Table A.9.

Second, information about communication with a subject co-ordinator, a year level co-ordinator, and the principal or vice-principal is obtained by a similar method. Teachers were asked how frequently they talked with one of these people about a range of school issues. The approach were originally developed by Meyer and Cohen (1971)

Table A.9 Factor Pattern Matrix of an Oblimin Rotation: Teacher Work Interdependence

Item number	Item summary[a]	Factor 1	Factor 2	
T2	select materials	73		
T3	select topics	89		
T4	decide topic order	91		
T5	decide methods	75		
T6	prepare lessons	66		
T1	'determine group size'		67	
T7	teach lessons or courses		71	
T8	evaluate student progress		73	
T9	handle discipline problems		69	
	Eigen values	4.3	1.0	(0.8)
	Correlation between Factors = 0.55			

[a] See Appendix 2 for a full statement of the item.

Note: Decimal points have been dropped and loadings less than 0.3 have not been shown.

though the present study included a wider range of topics. The topics listed were developed with the interaction of covering both student welfare and curriculum issues. A series of principal components analysis showed that for each of the linkages there was two correlated clusters of items: student welfare and curriculum. The results of these analyses have been reported in Table A.10.

When all the structural coupling items were included in the one analysis the items clustered according to who was involved rather than the subject of the communication except in the case of the year level co-ordinator where a separation between student welfare and curriculum topics persisted. The details have been shown in Table A.11.

The eight scales measuring different aspects of structural coupling were found to have satisfactory values of the measure of internal consistency (coefficient alpha), although the value for the teacher action scale approached the lower bounds of acceptability. Details of the properties of these eight scales and the others which were based on the teacher questionnaire have been recorded in Table A.12.

Aggregated Measures of Structural Coupling

For the between-school analyses average item scores were computed for each school and these were combined to give school scores for each scale described above. These aggregated measures were correlated with other, except that involving communication with the year level co-ordinator about student welfare. Consequently an overall measure of structural coupling called 'linkage' was formed as the sum of each of the average scale scores except communication with the year level co-ordinator about student welfare.

Table A.10 Factor Pattern Matrices of Oblimin Rotations of Communication Items for Different Personnel

Item number	Item summary[a]	Subject co-ordinator factor		Year co-ordinator factor		Principal factor	
		1	2	1	2	1	2
2	discipline	84		87		91	
4	student welfare	83		83		80	
6	class behaviour	86		89		93	
8	student absence	91		84		86	
12	general behaviour	80		82		84	
13	particular welfare	87		86		84	
9	learning needs	63		59	31	54	38
1	general curriculum		90		78		76
3	reactions to lesson		63		70		61
5	schedule of activities		82		86		76
7	teaching resources		74		92		89
10	assessment		63		57	32	57
11	personal gripes	33	48		55	32	49
Eigen values		7.8	1.1	7.3	1.6	7.8	1.2
Correlations between factors		67		55		62	

[a] See Appendix 2 for a full statement of the items.

Note: Factor loadings less than 0.3 have not been shown and decimal points have been dropped.

Table A.11 Factor Pattern Matrix of Oblimin Rotation of Structural Coupling Measures[a]

	Item[b]	Factor 1	2	3	4	5
Teachers:	1				41	
	2				70	
	3				83	
	4				81	
	5				80	
	6				77	
	7				55	
	8				56	
	9	30		-35		
Subject:	1		48		32	
	2		87			
	3		67			
	4		82			
	5		52			
	6		94			
	7		58			
	8		76			
	9		76			
	10		61			
	11		74			
	12		92			
	13		87			
Year:	1					53
	2			-87		
	3			-42		51
	4			-80		
	5					64
	6			-88		
	7					68
	8			-76		
	9			-65		
	10			-41		45
	11			50		43
	12			-82		
	13			-83		

Table A.11 (Continued)

	Item[b]	Factor 1	2	3	4	5	
Principal:	1	62					
	2	85					
	3	56				33	
	4	88					
	5	60				30	
	6	84					
	7	43				35	
	8	79					
	9	80					
	10	70					
	11	64					
	12	88					
	13	89					
Eigen values		16.3	5.1	3.7	2.7	1.8	(1.2)

[a] Factor Correlation Matrix

	Factor 1	2	3	4
Factor 2	33			
Factor 3	-35	-34		
Factor 4	28	45	-23	
Factor 5	31	22	-24	21

[b] See Appendix 2 for a full statement of the items.

Correlation coefficients between each component and two possible composites have been shown in Table A.13.

In addition a principal components analysis of the school means on each of the scales was conducted. Results have been shown in Table A.14. It could be seen that the only scale which did not load on the first principal component was that involving communication with a year level co-ordinator about student welfare. For this study it was considered most appropriate to use a measure of the simplest underlying construct ('linkage') represented by the first principal component rather than to examine other groupings suggested by the rotated solution. That latter course of action remains an option for subsequent analyses.

Perceived Co-ordination

The effectiveness of co-ordination as perceived by teachers assessed using a seven item Likert scale. A typical item was 'there is effective co-ordination of the curriculum'. A principal component analysis confirmed that there was only one underlying dimension present. The first principal component accounted for 54 per cent of the variance. The value of coefficient alpha was 0.85. School scores for this measure were obtained by aggregating and then summing item scores.

Table A.12 Properties of Scales Based on Teacher Responses

Scale		No. items	Alpha rel.	Mean	SD	Possible range
Communication						
Teacher:	Action	4	.67	11.3	4.6	4-28
Teacher:	Planning	5	.86	15.3	5.9	5-35
Subject:	Welfare	7	.94	23.9	11.1	7-49
Subject:	Curriculum	6	.88	21.3	7.1	6-42
Year:	Welfare	7	.93	27.1	8.9	7-49
Year:	Curriculum	6	.88	14.1	7.1	6-42
Principal:	Welfare	7	.95	17.6	9.5	7-49
Principal:	Curriculum	6	.86	12.1	6.0	6-42
Co-ordination		7	.85	16.9	4.1	7-28
Satisfaction						
Organizational Environment		6	.79	28.3	5.0	6-36
Students		6	.87	24.1	6.2	6-36
Workload		4	.83	16.7	4.7	4-24
(Resources		3	.54	11.1	3.4	3-18)[a]

[a] Not used as a scale in any analyses.
N = 1646.

Table A.13 Correlation Coefficients Between School Means and Various Communication Measures and Composite Linkage Scores

		Linkage[a]	Total communication[b]
Teachers:	Planning	.55	.53
Teachers:	Action	.67	.67
Subject:	Welfare	.82	.76
Subject:	Curriculum	.67	.65
Year:	Welfare	-.15	.10
Year:	Curriculum	.62	.70
Principal:	Welfare	.80	.73
Principal:	Curriculum	.74	.72

[a] Composite formed as the sum of the listed components with the exception of communication with the year level co-ordinator about student welfare.
[b] Composite as the sum of all listed components.

Table A.14 Principal Components Analysis of School Means for Structural Coupling Scales

Scale		Unrotated solution			Rotated solution		
		1	2	3	1	2	3
Teacher:	planning	63		59		86	
Teacher:	action	74			37	68	
Subject:	welfare	79			55	55	
Subject:	curriculum	73		43		82	
Year:	welfare		93				96
Year:	curriculum	67	53	-32	77		44
Principal:	welfare	76		-45	83		
Principal:	curriculum	75		-39	82		
Eigen values		3.7	1.3	1.1			

Note: Values less than 0.3 have been omitted and decimal points have been dropped.

Teacher Job Satisfaction

The question concerned with job satisfaction listed 19 items about which teachers could indicate their level of satisfaction. Items were intended to form three scales; organizational environment (e.g. 'your involvement in decisions about school policy'), students (e.g. 'the general behaviour of students in the school'), and working conditions (e.g. 'the amount of preparation and correction required of you'). The factor analysis which has been reported in Table A.15 confirmed the first two dimensions but suggested that the working conditions dimension could be regarded as comprising a factor representing work load and a factor representing resource availability. Hence the question seemed to involve four rather than three dimensions of teacher job satisfaction. The internal consistency of the first three subscales was satisfactory for research purposes but no use was made of the resources subscale as it appeared to have a low reliability (see Table A.12).

Table A.15 Factor Pattern Matrix of An Oblimin Rotation Teacher Satisfaction[ab]

Item number[c]	Factor 1 (Students)	2 (Workload)	3 (Organizational environment)	4 (Resources)
1	61			
5	84			
9	79			
13	81			
15	78			
17	79			
4		77		
8		80		
12		88		
18		75		
3			75	
6			55	
7			86	
11			63	
14			42	33
16			66	
2				78
10				64
19				63
Eigen values	5.8	2.3	1.7	1.1

a Decimal points have been dropped and loadings smaller than 0.3 have been omitted.

b Factor Correlation Matrix

	Factor 1	2	3
Factor	.24		
Factor	.36	.31	
Factor	.29	.35	.32

REFERENCES TO APPENDIX 1

Ainley J., Batten, M. and Miller, H. Staying at High School in Victoria. (ACER Research Monograph No.23). Hawthorn, Vic.: ACER, 1984.

Bourke, S.F. The Teaching and Learning of Mathematics. (ACER Research Monograph No.25). Hawthorn, Vic.: ACER, 1984.

Bridges, E.M., and Hallinan, M.T. Subunit size, work system interdependence and employee absenteeism. Educational Administration Quarterly, 1978, 14, 22-24.

Child, D., The Essentials of Factor Analysis. London: Holt Rinehart and Winston, 1970.

Holdaway, E.A. Facet and overall satisfaction of teachers. Educational Administration Quarterly, 1978, 14, 30-48.

Hoy, W.K. New Measures of Structural Coupling. A working paper, Rutgers University, New York, 1979.

Meyer, J.W. and Cohen, E. The impact of the open space schools upon teacher influence and autonomy: The effects of an innovation. (Technical Report No.21). Stanford, Calif.: Stanford Centre for Research and Development in Teaching, 1971.

Miskel, C. and McDonald, M. Structural Coupling in Schools. Paper presented at the annual meeting of the American Educational Research Association, 1982.

Moser, C.A. and Kalton, G., Survey Methods in Social Investigation. London: Heinemaun Educational Books, 1973.

Ross, K.R. Sample design for educational survey research. Evaluation in Education: International Progress, 1978, 2(2), 106-95.

Wilson, M., Using the design effect concept. Melbourne: ACER, 1985 (mimeo).

APPENDIX 2

QUESTIONNAIRES

The Initial Survey
The Student Questionnaire
The Teacher Questionniare

ACER
Education Department of Victoria

Return to: **Rodney Reed**
Policy Planning Unit
Education Department of Victoria
2 Treasury Place
Melbourne 3002

Secondary School Organization Questionnaire

School Name: .....

School Number: .....

---

1 (a) On what length cycle does the school organize its timetable (e.g. 5 days)? .....5..... days

(b) If the teaching periods are uniform what is their duration? ..... minutes

(c) How many such periods make up one cycle of the timetable? ..... periods

(d) If the teaching periods are not uniform please describe the pattern _____

_____

(e) On what basis is the school program organized at each Year Level?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Year based	☐	☐	☐	☐	☐	☐
Half year based	☐	☐	☐	☐	☐	☐
Term based	☐	☐	☐	☐	☐	☐

Other (please specify) _____

2 (a) Does any part of the school function as a semi-autonomous sub-school? Yes ☐ No ☐

(b) If Yes, briefly describe its features:

e.g. split campus for senior Years: _____

split administration for senior schools: _____

vertical sub-schools across Year levels: _____

sub-schools encompassing one or more adjacent Year levels: _____

other: _____

3 By vertical grouping we mean the practice of students from two or more Year levels being in the one class for teaching.

How extensive is the operation of vertical grouping within the following Year levels?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
No vertical groupings	☐	☐	☐	☐	☐	☐
For all students for all their subjects	☐	☐	☐	☐	☐	☐
For all students for some of their subjects	☐	☐	☐	☐	☐	☐
For some students for all their subjects	☐	☐	☐	☐	☐	☐
For some students for some of their subjects	☐	☐	☐	☐	☐	☐

4 In planning student groupings and teacher assignments is consideration given to limiting the number of teachers in contact with students?

Yes ☐ No ☐

If Yes (a) to which whole Year levels does this apply? _____

(b) to which groups in Year levels does this apply? _____

(c) to which vertical groupings does this apply? _____

5 (a) How is pastoral care and guidance organized at each Year level?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
No organizational provision is made	☐	☐	☐	☐	☐	☐
In form groups from each Year level	☐	☐	☐	☐	☐	☐
In pastoral care groups from several Year levels	☐	☐	☐	☐	☐	☐

Other provisions (please specify): _____

5 (b) For each Year level please indicate the following information **with respect to pastoral care groups** and the teachers responsible for those groups.

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Are most of the students together in teaching groups also? (✓ = Yes)	☐	☐	☐	☐	☐	☐
Are these teachers mainly involved in teaching those students? (✓ = Yes)	☐	☐	☐	☐	☐	☐
What is the formal time allocation each week (cycle) in minutes or periods?	_____	_____	_____	_____	_____	_____

(c) Are there other features of the provision for pastoral care at your school? _____

_____

6 Which of the following best describes the school's teaching program at the Year levels listed?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
One type of course based on a series of separate subjects	☐	☐	☐	☐	☐	☐
A program of integrated studies which is taken by all students	☐	☐	☐	☐	☐	☐
Various types of largely separate courses (e.g. academic, vocational, commercial)	☐	☐	☐	☐	☐	☐
A program based on a compulsory core and a series of electives	☐	☐	☐	☐	☐	☐
A program based almost entirely on a series of electives or units	☐	☐	☐	☐	☐	☐

7 For the program at Year 12 could you supply the following information?

If no Year 12 is offered tick here and proceed to Q8 ☐

The number of VISE Group 1 Subjects taught _____ subjects

The number of VISE Group 1 Subjects taken by correspondence _____ subjects

The number of VISE Group 2 Subjects taught _____ subjects

The number of VISE Group 2 Study Structures (e.g. STC)* _____

The number of 'School developed' (not VISE) courses* _____ courses

The number of separate 'school' subjects (not VISE) _____ subjects

* (Please indicate the number of subjects involved if appropriate_____)

8 For the week (or teaching cycle) that you answer the questionnaire, complete the table below for each Year level:

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
The total number of separate subjects taught[a]	_____	_____	_____	_____	_____	_____
The average number of subjects taken by each student	_____	_____	_____	_____	_____	_____
The number of compulsory subjects which all students must take[b]	_____	_____	_____	_____	_____	_____

Notes:

a Count as separate subjects activities which involve a separate syllabus. For an integrated studies program count each strand/theme of the program as a 'separate subject'. Exclude correspondence subjects.

b Where a student chooses or is allocated to a course within a Year level, count as 'compulsory' the number of subjects which must be taken by all the students at that Year level.

9 If convenient could you please enclose a copy of your timetable?

Thank you for your help.

Rodney Reed (Education Department)
John Ainley (ACER)

ACER
Education Department of Victoria

Return to: Rodney Reed
Policy Planning Unit
Education Department of Victoria
2 Treasury Place
Melbourne 3002

Technical School Organization Questionnaire

School Name: .....

School Number: .....

---

1 (a) On what length cycle does the school organize its timetable (e.g. 5 days)? ..... _____ days

(b) If the teaching periods are uniform what is their duration? ..... _____ minutes

(c) How many such periods make up one cycle of the timetable? ..... _____ periods

(d) If the teaching periods are not uniform please describe the pattern _____

_____

(e) On what basis is the school program organized at each Year Level?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Year based	☐	☐	☐	☐	☐	☐
Half year based	☐	☐	☐	☐	☐	☐
Term based	☐	☐	☐	☐	☐	☐

Other (please specify) _____

2 (a) Does any part of the school function as a semi-autonomous sub-school? Yes ☐ No ☐

(b) If Yes, briefly describe its features:

e.g. split campus for senior Years: _____

split administration for senior schools: _____

vertical sub-schools across Year levels: _____

sub-schools encompassing one or more adjacent Year levels: _____

other: _____

3 By vertical grouping we mean the practice of students from two or more Year levels being in the one class for teaching.

How extensive is the operation of vertical grouping within the following Year levels?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
No vertical groupings	☐	☐	☐	☐	☐	☐
For all students for all their subjects	☐	☐	☐	☐	☐	☐
For all students for some of their subjects	☐	☐	☐	☐	☐	☐
For some students for all their subjects	☐	☐	☐	☐	☐	☐
For some students for some of their subjects	☐	☐	☐	☐	☐	☐

4 In planning student groupings and teacher assignments is consideration given to limiting the number of teachers in contact with students?

Yes ☐ No ☐

If Yes (a) to which whole Year levels does this apply? _____

(b) to which groups in Year levels does this apply? _____

(c) to which vertical groupings does this apply? _____

5 (a) How is pastoral care and guidance organized at each Year level?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
No organizational provision is made	☐	☐	☐	☐	☐	☐
In form groups from each Year level	☐	☐	☐	☐	☐	☐
In pastoral care groups from several Year levels	☐	☐	☐	☐	☐	☐

Other provisions (please specify): _____

5 (b) For each Year level please indicate the following information with respect to pastoral care groups and the teachers responsible for those groups.

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Are most of the students together in teaching groups also? (✓ = Yes)	☐	☐	☐	☐	☐	☐
Are these teachers mainly involved in teaching those students? (✓ = Yes)	☐	☐	☐	☐	☐	☐
What is the formal time allocation each week (cycle) in minutes or periods?	_____	_____	_____	_____	_____	_____

(c) Are there other features of the provision for pastoral care at your school? _____

_____

6 Which of the following best describes the school's teaching program at the Year levels listed?

(tick one box in each column)

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
One type of course based on a series of separate subjects	☐	☐	☐	☐	☐	☐
A program of integrated studies which is taken by all students	☐	☐	☐	☐	☐	☐
Various types of largely separate courses (e.g. academic, vocational, commercial)	☐	☐	☐	☐	☐	☐
A program based on a compulsory core and a series of electives	☐	☐	☐	☐	☐	☐
A program based almost entirely on a series of electives or units	☐	☐	☐	☐	☐	☐

7 For the program at **Year 12** could you supply the following information?

If no Year 12 is offered tick here and proceed to Q8 ☐

Is a Year 12 Technical Course (T12) provided?[a] ..... Yes ☐ No ☐

Is the Tertiary Orientation Program (TOP) provided?[a] ..... Yes ☐ No ☐

Are any full-time TAFE programs other than TOP provided?[b] ..... Yes ☐ No ☐

Are any part-time TAFE programs or subjects other than TOP provided?[b] ..... Yes ☐ No ☐

How many VISE Group 2 subjects are provided? ..... _____ subjects

How many VISE Group 1 subjects are provided? ..... _____ subjects

How many VISE Group 2 Study Structures (e.g. STC) are provided? ..... _____

How many VISE Group 1 subjects are taken by correspondence? ..... _____ subjects

Are any other courses or separate subjects (not mentioned above) provided? ..... Yes ☐ No ☐

a If YES please indicate the number of courses provided.

b If YES please give details (of the numbers and titles) in the space adjacent or on a separate sheet of paper.

8 For the week (or teaching cycle) that you answer the questionnaire, complete the table below for each Year level:

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
The total number of separate subjects taught[a]	_____	_____	_____	_____	_____	_____
The average number of subjects taken by each student	_____	_____	_____	_____	_____	_____
The number of compulsory subjects which all students must take?[b]	_____	_____	_____	_____	_____	_____

Notes:

a Count as separate subjects activities which involve a separate syllabus. For an integrated studies program count each strand/theme of the program as a 'separate subject'. Exclude correspondence subjects.

b Where a student chooses or is allocated to a course within a Year level, count as 'compulsory' the number of subjects which must be taken by all the students at that Year level.

9 If convenient could you please enclose a copy of your timetable?

Thank you for your help.

Rodney Reed (Education Department)
John Ainley (ACER)

SCHOOL LIFE

Student Questionnaire

This questionnaire is about life in secondary school. There are no right or wrong answers—we are just trying to find out what students of different ages feel about school life. All the answers are confidential.
First of all, could you provide the following information:

School: .....

Year level: .....

Sex (M or F): .....

Each item on the next two pages says that **My School is a Place Where** some particular thing happens to you or you feel a particular way. We want you to say whether you **Definitely Agree, Mostly Agree, Mostly Disagree,** or **Definitely Disagree** with the items.

Please read each item carefully and tick the answer which best describes how you feel.

Don't forget that you have to put 'My School is a Place Where' before each item for it to make sense, e.g. '**My School is a Place Where** I feel important'.

1 MY SCHOOL IS A PLACE WHERE . . .

(Tick one box in each line)

	Definitely Agree	Mostly Agree	Mostly Disagree	Definitely Disagree
• teachers treat me fairly in class.	☐	☐	☐	☐
• I feel proud to be a student.	☐	☐	☐	☐
• the things I learn are important to me.	☐	☐	☐	☐
• people look up to me.	☐	☐	☐	☐
• I feel depressed.	☐	☐	☐	☐
• I feel it easy to get to know other people.	☐	☐	☐	☐
• I really get involved in my school work.	☐	☐	☐	☐
• I like learning.	☐	☐	☐	☐
• I get enjoyment from being there.	☐	☐	☐	☐
• other students are very friendly.	☐	☐	☐	☐
• I feel restless.	☐	☐	☐	☐
• teachers give me the marks I deserve.	☐	☐	☐	☐
• I have acquired skills that will be of use to me when I leave school.	☐	☐	☐	☐
• I always achieve a satisfactory standard in my work.	☐	☐	☐	☐
• other people care what I think.	☐	☐	☐	☐
• teachers take a personal interest in helping me with my school work.	☐	☐	☐	☐
• I am treated with respect by other students.	☐	☐	☐	☐

Copyright © ACER 1984
The Australian Council for Educational Research Limited
Radford House, 9 Frederick Street, Hawthorn, Victoria 3122

171

MY SCHOOL IS A PLACE WHERE . . .

	Definitely Agree	Mostly Agree	Mostly Disagree	Definitely Disagree
• mixing with other people helps me to understand myself.	☐	☐	☐	☐
• I feel lonely.	☐	☐	☐	☐
• the things I learn will help me in my adult life.	☐	☐	☐	☐
• I know people think a lot of me.	☐	☐	☐	☐
• I know how to cope with the work.	☐	☐	☐	☐
• teachers help me to do my best.	☐	☐	☐	☐
• I get upset.	☐	☐	☐	☐
• I am given the chance to do work that really interests me.	☐	☐	☐	☐
• I know I can do well enough to be successful.	☐	☐	☐	☐
• the things I am taught are worthwhile learning.	☐	☐	☐	☐
• I feel important.	☐	☐	☐	☐
• teachers are fair and just.	☐	☐	☐	☐
• I am a success as a student.	☐	☐	☐	☐
• I really like to go each day.	☐	☐	☐	☐
• I learn to get along with other people.	☐	☐	☐	☐
• I feel worried.	☐	☐	☐	☐
• the work I do is good preparation for my future.	☐	☐	☐	☐
• I feel proud of myself.	☐	☐	☐	☐
• other students accept me as I am.	☐	☐	☐	☐
• I have learnt to work hard.	☐	☐	☐	☐
• I get on well with the other students in my class.	☐	☐	☐	☐
• I find that learning is a lot of fun.	☐	☐	☐	☐
• teachers listen to what I say.	☐	☐	☐	☐

Please use this space to write down any other things at school that make a difference to the way you feel when you are there.

2 When do you plan to leave school? *(Tick one box)*

Before the end of Year 10.	☐
At the end of Year 10.	☐
At the end of Year 11.	☐
At the end of Year 12.	☐
I haven't made up my mind.	☐

3 What do you plan to do after leaving school? *(tick as many boxes as you need to)*

Full-time job.	☐	
Full-time study.	☐	
Part-time job.	☐	
Part-time study.	☐	
Don't know.	☐	
Other.	☐	(please specify.....)

4 (a) Do you plan to do any further study (full-time or part-time) after you leave school?

Yes ☐ ▼ *Go on to part (b)*

No ☐ → *Go to Question 5*

(b) What type of course do you hope to do?

(Tick one box and use the space beside it to indicate the type of course: e.g. Science)

		Type of course
University course.	☐	.....
College of Advanced Education (CAE) or Teachers College course.	☐	.....
Apprenticeship.	☐	.....
Other Technical and Further Education (TAFE) course.	☐	.....
Other (please explain). _____	☐	.....

5 How good are you at school work compared to other students in your year level?

A lot above average.	☐
A little above average.	☐
About average.	☐
A little below average.	☐
A lot below average.	☐

6 Please list the subjects you are studying this term.

1	_____	6	_____
2	_____	7	_____
3	_____	8	_____
4	_____	9	_____
5	_____	10	_____

7 **If you are not a Year 12 student tick this box and go to QUESTION 8** ☐ →

If you are a Year 12 student please indicate the type of course which you are studying.

(tick one box)

A Technical Year 12 (T12) course.	☐
A Tertiary Orientation Program (TOP).	☐
A course of VISE Group 1 subjects only.	☐
A course of VISE Group 2 subjects only.	☐
A mixture of Group 1 and Group 2 subjects.	☐
A VISE Group 2 study structure (e.g. STC).	☐
A school developed course.	☐
Another type of course (please specify.....)	☐

8 **What is the present or last main occupation of your father or guardian? (Name the occupation and describe what he does.)**

Occupation .....

What he does .....

9 **What is the present or last main occupation of your mother? (Name the occupation and describe what she does.)**

Occupation.....

What she does.....

10 **In what country was your father born?**

Country.....

11 **In what country was your mother born?**

Country.....

12 **In conclusion, we would like to know your name in case we are able to conduct any follow up studies.**

Your name .....

Thank you for your help.

AUSTRALIAN COUNCIL FOR EDUCATION RESEARCH

SCHOOL LIFE

Teacher Questionnaire

This questionnaire forms part of a study of structural arrangments in post-primary schools.

All the answers you give are confidential

---

1 ABOUT YOU AND YOUR WORK

(a) How long in total have you been teaching? _____ years

(b) How long have you been in your present school? _____ years

(c) What is your sex? Male ☐ Female ☐

(d) What are your main teaching subject areas? 1 _____ 2 _____

(e) At what year levels do you teach?

Year level	7	8	9	10	11	12
Number of lessons per week						

(f) What special co-ordination duties do you have (e.g. Year 11 co-ordinator, subject co-ordinator, careers advice etc.)?

_____

2 COMMUNICATING IDEAS

(a) How often, on the average, do you jointly engage in each of the following activities with **one or more other teachers** in your school? *(Tick one box in each line)*

	Every Day	Several times per week	Once per week	Once per month	Once per term	Once per year	Never
• Jointly determine the size of instructional groups.	☐	☐	☐	☐	☐	☐	☐
• Jointly select instructional materials.	☐	☐	☐	☐	☐	☐	☐
• Jointly select topics to be taught.	☐	☐	☐	☐	☐	☐	☐
• Jointly decide the order in which topics will be taught.	☐	☐	☐	☐	☐	☐	☐
• Jointly decide the methods to be used in teaching the topics.	☐	☐	☐	☐	☐	☐	☐
• Jointly prepare lessons, units, or courses.	☐	☐	☐	☐	☐	☐	☐
• Jointly teach lessons, units, or courses.	☐	☐	☐	☐	☐	☐	☐
• Jointly evaluate student progress.	☐	☐	☐	☐	☐	☐	☐
• Jointly decide how to handle discipline problems.	☐	☐	☐	☐	☐	☐	☐

(b) **How often, on the average, do you talk with your main subject co-ordinator about the following matters?** *(Tick one box in each line)*

	Every Day	Several times per week	Once per week	Once per month	Once per term	Once per year	Never
• General curriculum plans.	☐	☐	☐	☐	☐	☐	☐
• Discipline of students.	☐	☐	☐	☐	☐	☐	☐
• Student reactions to a specific lesson.	☐	☐	☐	☐	☐	☐	☐
• Student welfare matters.	☐	☐	☐	☐	☐	☐	☐
• The schedule of teaching activities.	☐	☐	☐	☐	☐	☐	☐
• Student behaviour in class.	☐	☐	☐	☐	☐	☐	☐
• Getting teaching resources or supplies.	☐	☐	☐	☐	☐	☐	☐
• Unexplained student absence.	☐	☐	☐	☐	☐	☐	☐
• Learning needs of particular students.	☐	☐	☐	☐	☐	☐	☐
• Assessment of students.	☐	☐	☐	☐	☐	☐	☐
• Personal gripes or concerns about work.	☐	☐	☐	☐	☐	☐	☐
• General student behaviour.	☐	☐	☐	☐	☐	☐	☐
• The welfare of particular students.	☐	☐	☐	☐	☐	☐	☐

(c) **How often, on the average, do you talk with your Year level co-ordinator about the following matters?** *(Tick one box in each line)*

	Every Day	Several times per week	Once per week	Once per month	Once per term	Once per year	Never
• General curriculum plans.	☐	☐	☐	☐	☐	☐	☐
• Discipline of students.	☐	☐	☐	☐	☐	☐	☐
• Student reactions to a specific lesson.	☐	☐	☐	☐	☐	☐	☐
• Student welfare matters.	☐	☐	☐	☐	☐	☐	☐
• The schedule of teaching activities.	☐	☐	☐	☐	☐	☐	☐
• Student behaviour in class.	☐	☐	☐	☐	☐	☐	☐
• Getting teaching resources or supplies.	☐	☐	☐	☐	☐	☐	☐
• Unexplained student absence.	☐	☐	☐	☐	☐	☐	☐
• Learning needs of particular students.	☐	☐	☐	☐	☐	☐	☐
• Assessment of students.	☐	☐	☐	☐	☐	☐	☐
• Personal gripes or concerns about work.	☐	☐	☐	☐	☐	☐	☐
• General student behaviour.	☐	☐	☐	☐	☐	☐	☐
• The welfare of particular students.	☐	☐	☐	☐	☐	☐	☐

(d) How often, on the average, do you **talk with the principal or a vice-principal**, about the following matters? *(Tick one box in each line)*

	Every Day	Several times per week	Once per week	Once per month	Once per term	Once per year	Never
• General curriculum plans.	☐	☐	☐	☐	☐	☐	☐
• Discipline of students.	☐	☐	☐	☐	☐	☐	☐
• Student reactions to a specific lesson.	☐	☐	☐	☐	☐	☐	☐
• Student welfare matters.	☐	☐	☐	☐	☐	☐	☐
• The schedule of teaching activities.	☐	☐	☐	☐	☐	☐	☐
• Student behaviour in class.	☐	☐	☐	☐	☐	☐	☐
• Getting teaching resources or supplies.	☐	☐	☐	☐	☐	☐	☐
• Unexplained student absence.	☐	☐	☐	☐	☐	☐	☐
• Learning needs of particular students.	☐	☐	☐	☐	☐	☐	☐
• Assessment of students.	☐	☐	☐	☐	☐	☐	☐
• Personal gripes or concerns about work.	☐	☐	☐	☐	☐	☐	☐
• General student behaviour.	☐	☐	☐	☐	☐	☐	☐
• The welfare of particular students.	☐	☐	☐	☐	☐	☐	☐

3 CO-ORDINATION OF THE PROGRAM

Please indicate to what extent you think that the following statements describe the co-ordination of the teaching program in your school? *(Tick one box in each line)*

	Definitely Agree	Mostly Agree	Mostly Disagree	Definitely Disagree
• there is extensive communication about the teaching process.	☐	☐	☐	☐
• teachers consult with each other about their teaching.	☐	☐	☐	☐
• there is sufficient contact between different sections of the school in curriculum planning.	☐	☐	☐	☐
• there is effective co-ordination of the curriculum.	☐	☐	☐	☐
• teachers consult with subject co-ordinators about their teaching.	☐	☐	☐	☐
• there is extensive communication about the curriculum.	☐	☐	☐	☐
• teachers consult with year level co-ordinators about their teaching.	☐	☐	☐	☐

4 POLICY FORMULATION

Who most often determines school policy and practices in each of the following areas?

What is required here is your perception of school practice and not necessarily the formal responsibility as laid down in regulations or departmental instructions. *(In each box enter the letter which best describes who most often determines the particular item).*

A the Principal alone
B the Principal and senior staff
C the Principal and a staff group (e.g. curriculum committee or a staff meeting)
D the Principal and individual teachers
E the Head of Department alone
F the Head of Department and its staff
G the Head of Department and individual teachers
H the Year level co-ordinator
I the Year level co-ordinator and the staff at that level
J the Year level co-ordinator and individual teachers
K the individual teacher
L other (please specify beside the item concerned)

General school curriculum objectives ..... ☐
The range and balance of the curriculum structure at each Year level ..... ☐
The content of each subject area ..... ☐
The methods of instruction ..... ☐
Selection of new books and materials ..... ☐
The form of internal assessment of particular Year levels ..... ☐
Homework policy ..... ☐
The allocation of teachers to particular classes within subject areas ..... ☐
The allocation of non-teaching duties to teachers ..... ☐
Range and type of extra-curriculum activities ..... ☐
The allocation of duties to teacher aides ..... ☐

4 YOUR SATISFACTION WITH TEACHING

These items are intended to allow you to indicate the degree to which you are satisfied with various aspects of teaching.

How satisfied are you with the following aspects of teaching?

(Tick one box in each line)

	SATISFIED			DISSATISFIED			NOT RELEVANT
	Highly	Moderately	Slightly	Slightly	Moderately	Highly	
Your relationships with students.	☐	☐	☐	☐	☐	☐	☐
The availability of library and audio-visual resources.	☐	☐	☐	☐	☐	☐	☐
The expectations senior staff hold for you as a teacher.	☐	☐	☐	☐	☐	☐	☐
The number of hours you teach each week.	☐	☐	☐	☐	☐	☐	☐
The attitudes of students towards learning.	☐	☐	☐	☐	☐	☐	☐
Your freedom to select teaching methods.	☐	☐	☐	☐	☐	☐	☐
Your relationship with senior staff in the school.	☐	☐	☐	☐	☐	☐	☐
The number of hours of non-teaching duties each week.	☐	☐	☐	☐	☐	☐	☐
The general behaviour of students in the school.	☐	☐	☐	☐	☐	☐	☐
The availability of ancillary staff to assist you.	☐	☐	☐	☐	☐	☐	☐
Your relationships with other teachers.	☐	☐	☐	☐	☐	☐	☐
The preparation time available during the school day.	☐	☐	☐	☐	☐	☐	☐
The average level of student achievement in your classes.	☐	☐	☐	☐	☐	☐	☐
The provision of useful advice to assist you with problems you encounter in teaching.	☐	☐	☐	☐	☐	☐	☐
The ability level of students in your classes.	☐	☐	☐	☐	☐	☐	☐
Your involvement in decisions about school policy.	☐	☐	☐	☐	☐	☐	☐
The general behaviour of students in your classes.	☐	☐	☐	☐	☐	☐	☐
The amount of preparation and correction required of you.	☐	☐	☐	☐	☐	☐	☐
The opportunities for useful in-service education.	☐	☐	☐	☐	☐	☐	☐

Thank you for your help.

178

The study reported in this monograph set out to investigate the organization and curriculum of Victorian government secondary schools and how those factors influenced what teachers did and what views students had of the quality of their school life.

The experience provided in government secondary schools occupies a significant part of the lives of a large section of the population and is worthy of consideration in its own right as well as in terms of its outcomes.

The study found that patterns of school organization could influence the quality of school life for teachers and students in small but significant ways. Teachers' job satisfaction was enhanced when there was frequent communication among staff and when they saw the curriculum as well-coordinated. Students viewed the quality of school life more favourably when the curriculum recognized their diverse aptitudes and when the level of communication among their teachers was high.

John Ainley is a Chief Research Officer in the Social Context of Education Division of the Australian Council for Education Research.

Rodney Reed is a Senior Policy and Planning Officer in the Policy and Planning Unit of Schools Division of the Victorian Ministry of Education.

Hilary Miller is a Research Assistant in the Social Context of Education Division of the Australian Council for Educational Research.

ACER

ISBN 0 86431 048 X